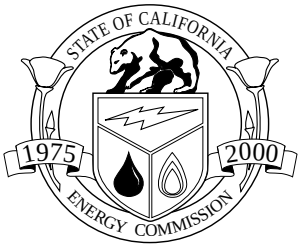
HANDBOOK

HOW TO HIRE AN ENERGY SERVICES COMPANY

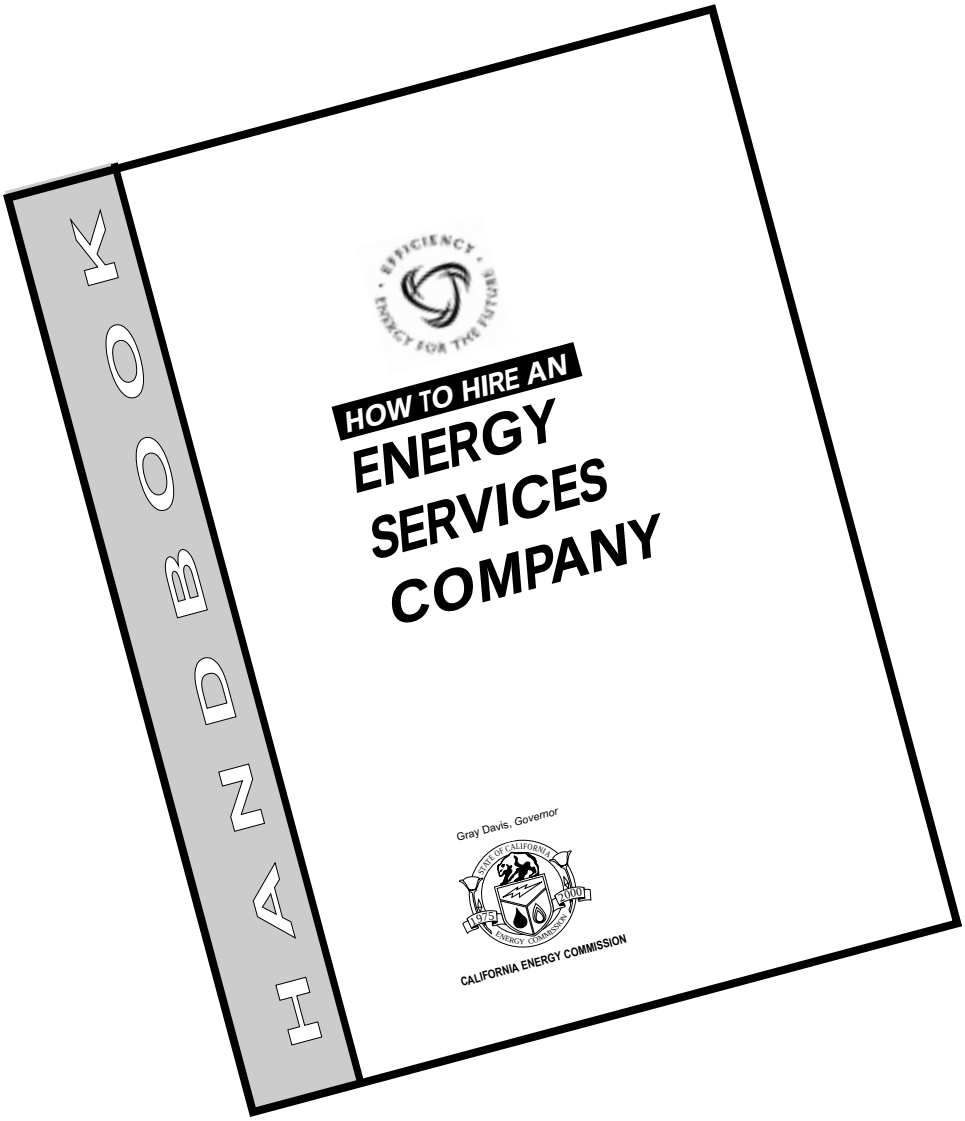
Gray Davis, *Governor*



JANUARY 2000

CALIFORNIA ENERGY COMMISSION

P400-00-001D



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Acknowledgements

This document, *How to Hire an Energy Services Company*, was prepared, edited and reviewed by the following California Energy Commission staff: Bill Knox (now with the California Department of General Services), Virginia Lew, Michael Magee (now with the Community Colleges-Chancellors Office), Bradley Meister, P.E., Daryl Mills, Mike Sloss and Sharif Traylor (now with the California Department of General Services).

The Energy Commission staff is grateful for the thoughtful comments and suggestions provided by the following: Tonie Baser, California Department of General Services;Tom Beckett, Contra Costa Community College District; Joseph Camera, Honeywell, Incorporated; Jim Flanagan, Pacific Gas and Electric Company; Shirley Hansen, Hansen Associates; Bill Kelly, Viron Energy Services; Bob Kelly, Madera Community Hospital; Harmick Marcarian, Los Angeles Unified School District (now with California Polytechnic University, Pomona); Steven McQuerry, Siebe Environmental Controls; Bill Ross, Johnson Controls; Donald O. Smith, P.E., Energy Masters Corporation; Victor Takahashi, California State University-Stanislaus; Gerald Woodward, Landis and Gyr (now Siemans Building Technologies, Inc.); Christine Vance, City and County of San Francisco, Bureau of Energy Conservation; and Tom Vence, Brown Vence and Associates.

The authors acknowledge Robert Schlichting, Jackie Goodwin and Elizabeth Parkhurst for assistance in editing the document; Eurlyne Geiszler and Merry Bronson for production and layout; and Tino Flores and Sue Foster for cover design.

This document is one of a series of publications contained in the Energy Commission's *Energy Efficiency Project Management Handbook*, which is designed to help local governments, schools and other public entities successfully implement energy efficiency projects in their facilities.

For information on how to obtain copies of other documents, contact the Nonresidential Buildings Office at (916) 654-4008. All documents can be downloaded from the Energy Commission's Web page at:

www.energy.ca.gov/reports/efficiency_handbooks

Fifth edition, January 2000

How To Hire an Energy Services Company

Energy Efficiency Project Management Handbook

California Energy Commission
Energy Efficiency Division

Hiring an Energy Services Company (ESCO) is one way to identify and implement energy efficiency projects in your facility. Rather than hiring multiple consultants, an ESCO can provide experienced personnel to handle all aspects. They can also provide or obtain project financing, operate and maintain the energy equipment and guarantee the energy savings and performance of the equipment. If your organization knows what services are needed but lacks staff time or experience, hiring an ESCO could provide the expertise needed to complete your project.

This guide provides information on ESCOs and their services. It will help you decide whether you need an ESCO and how to select the best one for your facility. This section concludes with a checklist on what you can do to ensure a successful working relationship with your ESCO.

Though this guide is directed at public agencies - cities, counties, public schools, colleges and hospitals and special districts, some of the information may also be applicable to others.

The appendices contain a sample Request for Qualifications (RFQ) agreement and other information on ESCOs.

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I. WHAT IS AN ENERGY SERVICES COMPANY (ESCO)?

An ESCO is a single firm that manages and coordinates all phases of an energy project and provides many types of services. This section discusses these services, the different types of ESCOs, and how they differ from other types of contractors.

A. Common Services

Typical services provided by most ESCOs include:

- Energy audit
- Construction management services, including preparation of performance specifications, project design and project commissioning
- Project financing
- Project monitoring and guarantee of energy savings
- Equipment maintenance and operations

Each of these services is discussed in detail later in this guide.

B. Types of Energy Services Companies

Based on a 1998 Energy Commission survey, the ESCOs serving California are listed in Appendix A. The main types are:

- **Large companies with existing energy equipment businesses.** These companies have all the technical and financial expertise within their own staff. They generally focus on large projects that cost more than $500,000 and provide all project services, from energy audit through equipment maintenance and monitoring. Some also provide administrative services such as personnel to manage and operate your facility. Many are directly involved in the energy equipment business, especially, heating, ventilating and air conditioning equipment and controls.

- **Large companies with existing energy equipment servicing businesses.** These companies are directly involved in the installation and maintenance of equipment C mostly heating, ventilating and air conditioning equipment. Many have expertise and knowledge in lighting and HVAC technologies. Some will focus on large projects that cost more than $500,000 and others are willing to do small lighting projects costing less than $100,000. These companies can provide all services from the energy audit through equipment maintenance and monitoring.

- **Companies that were previously energy consultants.** These companies have expertise and knowledge with many types of technologies. Larger ones have all the technical experts within their company while smaller ones will team up with others to provide technical services such as energy audits, project design, project management and

monitoring. Services such as equipment maintenance are generally contracted to other companies.

- **Utility-originated firms.** With deregulation of the electric industry in California, major gas and electric utilities have established companies to provide services including energy audits, financing, installation and maintenance. Many will guarantee energy savings and some also include environmental permitting and hazardous waste disposal.

- **Companies specializing in one technology.** For a specialized technology like lighting, companies involved in the manufacture and sale of equipment also can provide technical analysis, equipment specifications and project management. Example firms include GE Lighting and Parke Industries.

C. Comparison with Other Types of Contractors.

ESCOs differ from architectural and engineering (A&E) firms in several ways. While both supply engineering services, ESCOs also can provide or help arrange financing, maintain equipment and guarantee project performance or savings.

Some ESCOs enter into **performance contracts** which guarantee that the cost of the project is recovered from the energy savings. If the project fails to meet the guaranteed savings amount, the ESCO may be required to compensate your organization.

On the other hand, A&E firms provide only technical analysis, engineering design and, sometimes, construction management services. They rarely provide project financing, guarantee the project performance or savings, or offer equipment maintenance.

II. WHAT TYPICAL SERVICES DO ESCOs PROVIDE?

Historically ESCOs provided a complete package of services. A recent Energy Commission survey indicated that most ESCOs will bid for specific services, tailoring their service to meet customer needs.

Typical ESCO services include:

A. Energy Audit

An energy audit analyzes the operation of your major energy-using systems and determines whether improvements can increase efficiency.

Some audits are prepared by companies that specialize in a single technology and will focus on one area, such as lighting.

A comprehensive audit, however, analyzes all cost-effective energy projects for lighting, HVAC equipment, domestic hot water systems, controls and energy generation systems. Generally prepared when performance contracting is involved, comprehensive audits are referred to by the ESCO industry as an "investment grade audit." They are detailed energy surveys that evaluate the economic performance and investment value of the project.

The Energy Commission's *Guide to Preparing Feasibility Studies for Energy Efficiency Projects* discusses what is typically contained in an audit.

B. Construction Management Services

By serving as a construction manager and overseeing the installation of the project, an ESCO can:

- Develop the overall project approach
- Manage the selection of contractors, such as A&E firms and general contractors
- Manage contractor work
- Provide on-site construction management and inspection services
- Obtain all regulatory permits
- Direct equipment testing, commissioning and monitoring to verify energy savings

An ESCO may perform some or all of these tasks. A detailed description of these tasks is contained in the Energy Commission's publication entitled *How to Hire a Construction Manager for Your Energy Efficiency Project*.

C. Project Financing

You can hire an ESCO and still use your own funds to finance the projects. If you lack funding, some ESCOs provide financing. Others identify possible sources and serve as a broker. Most ESCOs arrange third-party municipal lease financing for public sector customers.

Most public sector projects are typically funded through municipal leases or master leases which offer tax benefits to the leasing company. The leasing company passes a portion of the tax benefits back to the public entity in the form of a lower interest charge.

For more information on project financing, please refer to the Energy Commission publication entitled *Financing Public Sector Energy Efficiency Projects*.

Financing terms can be arranged so that energy savings cover capital and interest. Financing can also be structured to be "off balance sheet" so only the amount that is paid during a designated accounting period is on the balance sheet.[1] All future payments do not appear on the balance sheet. This type of structure could be important in organizations that have reached their maximum debt limit or is limited by statute, bond ratings, or fiscal prudence from assuming more debt.[2] All other financing options will increase debt.

Financing is generally available for energy projects through ESCOs or other sources. Don't let lack of funds prevent you from making energy investments that pay for themselves from the savings.

D. Project Guarantees

Having the ESCO guarantee project performance may help get your project approved through management. Project guarantees, however, are complex and tend to increase project cost. It may take a long time to negotiate a mutually acceptable agreement. One of the complexities is reaching agreement on an acceptable energy use baseline C the basis for calculating future savings.

To verify that the project meets the performance guarantees, ESCOs provide project monitoring and verification. Monitoring can be done by installing meters on specific equipment to measure equipment performance and operation, or it can involve tracking utility bills in the affected buildings. Since it requires that data be collected and evaluated for the period of the performance agreement, project metering can be expensive. Metering of lighting and heating, ventilating and air conditioning equipment can cost between one and 10 percent of the construction cost, depending on the number of measurements and systems and parameters measured.[1]

Most ESCOs generally do not install meters but will use energy accounting software to track utility bills. According to Matthew Muniz, Alameda County's General Services Agency, ESCOs charge between three and five percent of the project cost for the guarantee. In addition to this cost, many ESCOs will want your organization to enter into an annual maintenance contract which is discussed in the next section.

Some believe that guarantees are "not worth much" since there are many ways to account for energy savings, and any method is subject to "error and interference."[3] Typically, only some equipment is monitored and the data is extrapolated for the equipment not monitored. The calculation of "actual" savings is subject to analysis and assumptions made by the ESCO; often it is difficult to dispute their findings. As a result, actual savings cannot be determined with absolute certainty. Independent savings verification is an option, but this adds additional cost to your project.

Keep in mind that a project does not need a guarantee to succeed, if it has a good energy

audit with realistic recommendations, a capable project manager, and a team that knows how to get the projects installed. As one engineer put it, "Doing your homework is your best guarantee."[3]

E. Equipment Maintenance and Servicing

In order to guarantee performance or savings, an ESCO often will require a maintenance contract and some control over your equipment. This helps the ESCO ensure that the installed equipment will achieve the guaranteed savings stipulated in your contract.

According to Matthew Muniz of Alameda County, General Services Agency, the annual cost of a maintenance contract is between one and five percent of the project cost and depends on the level of service desired. Maintenance services can include tracking utility bills, reviewing operation strategies, reporting on equipment operating problems, and repairing and replacing equipment.

In lieu of on-site maintenance, some ESCOs develop a check list of required maintenance for energy equipment. Your maintenance staff will be required to adhere to this checklist as part of your agreement.

For some ESCOs, maintenance agreements are a major part of their business.

F. Other Services

Some ESCOs provide a variety of other services, such as:

- **Administrative and technical support.** Qualified staff can be provided to operate and manage your facility.
- **Training.** With proper training, your in-house staff can operate and maintain the equipment, allowing you to forego the need for ESCO maintenance.
- **Specialized technical help.** The ESCO can monitor indoor air quality, evaluate electricity and gas purchase options, provide electricity or gas or accomplish other specialized tasks.

III. WHAT ARE TYPICAL CONTRACTS?

There are a number of ways to contract with ESCOs depending on the degree of risk that your organization assumes. If the ESCO assumes all the risks and guarantees project performance, the cost for their services will be higher.

Typical ESCO contracts include an audit of your facility, construction management, commissioning and assurances that the project savings will pay the debt service on the equipment. Though custom contracts are possible, the main types of contracts are discussed in the following section and a comparison is presented in Table 1 on page 9.

A. Shared Savings

In this arrangement, the ESCO provides the capital and energy audit and you provide the facility.[2] Cost savings are measured according to a mutually agreeable method and are shared between your facility and the ESCO on either a fixed or variable basis. Examples of typical shared arrangements include:

1. **Variable fee** -- C The fee depends on a fixed percentage of the monthly savings. As the monthly savings fluctuates, so does the fee.

2. **Scaled fee** -- The fee declines over time as the ESCO recovers its investment.

3. **Specified fee and split of savings in excess of the fee** -- The fee is fixed and any excess savings is split between the ESCO and your organization.

4. **Savings go to the ESCO until a specified dollar amount is reached** -- The ESCO initially gets all the cost savings from the project until a specified dollar amount. After that point, the ESCO splits the savings with your facility.

Here are some areas to consider regarding these arrangements:

- Shared savings contracts allow your organization to put the financing off balance sheet since the ESCO provides the financing. You do not need to use your organization's borrowing capacity.

- The ESCO carries financing, credit and performance risks. Since the ESCO assumes all these risk, the cost of money or the interest charged is higher than in other options.

- Public agencies cannot share savings, with private companies if tax-exempt financing is used. In shared savings contracts, ESCO financing is based on commercial interest rates which is higher than tax-exempt financing.

- If there are no cost savings, the ESCO does not get paid. If savings are greater than expected, you will pay more than expected for the use of the equipment. The ESCO and financier hope that the future price of energy will increase since it will increase their share of the savings.[2] For instance if the savings were $1,000,000 and you agreed to share 50 percent of the savings, the ESCO share will be $500,000. However, if the savings increased to $2,000,000, the amount to the ESCO will increase to $1,000,000 or 50

percent of $2,000,000. Unless an absolute dollar value is specified, this scenario can also happen in guaranteed savings approaches when excess savings are shared with the ESCO.

l With restructuring of the electric industry, future energy prices will be volatile and the risk to the ESCO greater since electricity prices could drop and negatively affect the savings. To reduce the risk, the ESCO will charge a higher interest rate for its money and this will impact the actual dollars available to invest in equipment.[1]

- In some cases, the ESCO can put your share of the savings in an escrow account which can be used for additional energy projects in the future.

- Shared savings contracts generally allow you to operate and maintain the equipment.

- Shared savings contracts can include some or all the services listed on pages 3 to 5.

B. Guaranteed Savings Contracts

Contracts can be set up to guarantee that the energy savings from the project will meet or exceed a certain minimum amount -- either the full amount or a percentage of the savings specified in the energy audit.

Here are some areas to consider:

- The savings are guaranteed to make your equipment payments or debt service, provided that energy prices do not fall below a specified floor price. The savings level is guaranteed to meet or exceed the specified minimum, usually an amount greater than your equipment payment.

- Project financing is fully provided by your organization through a loan, capital lease, municipal lease or operating lease. The financier does not rely on the savings guarantee since your organization is responsible for the financing. The guarantee's presence or absence has little effect on the cost of funds.[3]

- This approach allows the use of tax exempt financing and allows your organization to retain more of the savings than in shared savings contracts.[3] Tax exempt financing offers the best interest rates.

As part of a guaranteed savings contract, ESCOs monitor projects and sometimes provide equipment maintenance. This ensures that the equipment operates as specified to achieve the projected savings. The results of their monitoring and verification efforts are summarized in quarterly or semi-annual project saving reports. Other services listed on pages 3 to 5 may be included as well.

Public facilities like guaranteed savings contracts because the savings will pay for the project. This results in no out-of-pocket expenses. Though guarantees are a nice insurance policy, seldom do the projects not meet its intended energy savings goals and estimates.

C. No Guaranteed Savings Contracts

In this type of contract, the ESCO only provides the energy audit, design, construction management and commissioning. There is no guarantee of the

energy savings or performance. Your facility assumes the responsibility and financial risk. In exchange, your facility receives all the saving benefits associated with the projects. Project financing can be linked to the accrued savings from the project.

Table 1

Comparison of Shared Savings, Guaranteed Savings and Contracts with No Guarantees

Features	*Shared Savings*	*Guaranteed Savings*	*No Guaranteed Savings*
The cost savings pay for equipment over time.	Depends on Contract	Yes	Depends on how financing is structured
Minimal risk to your organization since the obligation is retired from the cost savings.	Yes	Depends on financing	Depends on how financing is structured
Contract structured so that the obligation is off balance sheet; your organization does not need to use its borrowing capacity.	Yes	Depends on financing	Depends on how financing is structured
Contract is considered new equity and is not required to meet internal investment criteria.	Yes	Yes	Yes
Equipment can be operated and maintained by your facility.	Yes	Depends on contract	Yes
Full cost savings for the projects are realized by your organization.	No	No	Yes, after fee for services is paid
Requires establishment of protocol for measuring energy savings.	Yes	Yes	No
Increases administrative burden and project cost.	Yes	Yes	Yes, but to a lesser degree
Project financing can be from tax-exempt bonds/leases.	No	Yes	Yes
Payment to ESCO varies with the energy savings.	Yes	No	Not applicable

D. Other Considerations

Once your organization is experienced in getting energy efficiency projects installed, you may realize that these projects often are low risk. You may forego the need for a guarantee and shoulder more of the risk in exchange for increased financial benefits. For example, your organization may:

- Decide to purchase energy efficient equipment and rely on the manufacturer's warranties, foregoing an ESCO guarantee.
- Perform your own post-installation maintenance and accept the risk of accountability within your own work force.
- Finance the installation and hire a construction manager or ESCO to be accountable for poor workmanship during installation.
- Forego the guaranteed savings if you are confident that the projections in the energy audit are valid.
- Perform your own post-installation monitoring or energy accounting to verify project savings.

IV. DO I NEED AN ENERGY SERVICES COMPANY (ESCO)?

The answer depends on these factors:

A. Do I have available staff to identify and implement the energy project?

If you use your own people, the cost savings that result are yours. But your staff often have other day-to-day responsibilities which could delay project completion and negate any savings from doing the project yourself. An ESCO can complete the project sooner and help you realize the energy benefits sooner.

B. What are my organization's strengths and weaknesses?

Evaluate your organization's strong points to determine whether you need an ESCO. The following table can help you:

Does My Organization Need an ESCO?

Strength/Weakness	If you answer YES	If you answer NO
Do you need help in getting internal buy-in into the project?	Consider an ESCO.	Consider contracting out the needed services.
Do you need help in identifying and implementing projects?	Consider an ESCO. By deciding early to use one, you may reduce project implementation costs and speed-up project installation.	Consider contracting out only the necessary services. Use in-house staff where possible.
Do you lack available and/or experienced staff to install and manage the project?	Consider an ESCO with the expertise to ensure timely project installation.	Use in-house staff where possible and consider contracting out needed services. An ESCO can be hired for certain services. It may require a stipulated savings amount when their staff and yours work simultaneously.
Do you lack available and experienced staff to maintain the equipment?	Consider an ESCO since it provides these and other services. You can also contract with a maintenance firm.	Use your staff.
Do you lack project financing?	Consider an ESCO to provide financing or to assist you in securing it. ESCOs typically secure financing from third parties such as municipal leasing companies, banks, state, etc.	Use your funds or secure outside funds from municipal leasing companies, banks, state, etc.

C. Do I plan to contract with many firms to identify and implement the project?

You may need to hire many contractors. For instance, you may need an engineering firm to prepare the energy audit and the project design, a construction manager to oversee the project installation, and a general contractor to install the projects. The competitive hiring, management and coordination of all these contractors takes considerable time.

Working with several contractors requires good communication to ensure everyone understands the projects and the goals of your agency. In contrast, an ESCO typically has staff who can identify, manage and implement your projects and ensure accountability of all work.

D. Do I have financing?

Finding outside financing can take time. Some ESCOs can provide financing or are able to identify it for your projects. Typically, they refer public entities to tax exempt lease programs since public agencies can secure the lowest cost financing through tax exempt methods not available to ESCOs.

E. Do I need a guarantee for the savings?

According to James Waltz, Energy Consultant, the best guarantee for a project is "proper execution of the entire process and doing energy efficiency work that makes sense." Expected savings should be realized if the energy audit contains realistic assumptions, the identified projects are right for your facility and the equipment is properly installed. It is more important to focus on the experience and expertise of the individuals or firms doing the energy audit and the installation than on a guarantee.

A guarantee for the savings may not be needed for lighting projects or replacements of heating, ventilating and air conditioning (HVAC) equipment. Lighting projects generally have definite energy reductions since the only variable is the operating hours which are controlled by your facility, a savings guarantee may not be needed.

You may also want to forgo a guarantee when replacing equipment that is old or does not meet local regulations. Because the decision to purchase the equipment is based on need and not energy savings, guarantees add nothing to the project. A guarantee may be useful for verifying savings for complex HVAC controls which depend on operating assumptions and schedules.

A guarantee often helps decision makers feel at ease and confident that the energy savings pays the debt service.

F. Do you already have an energy audit which is less than two years old?

If you have an audit and know what projects you want, the next steps are to secure financing and proceed with installation. You can install the projects yourself, hire contractors to do it or secure the services of a construction manager.

If you have a recent audit but do not know how to proceed with installation, it may be wise to hire an ESCO. However, the ESCO may do another audit, especially if it is guaranteeing project performance or savings. The cost of the new audit is charged to your facility.

G. Will your management support a decision to contract with an ESCO?

When their governing boards approve, public organizations can hire ESCOs through the sole source process. Many organizations, however, still opt for competitive bidding. To secure ESCO proposals, a Request for Qualifications (RFQ) needs to be developed. Once the ESCO is selected, contract negotiations could be lengthy, especially if guaranteeing the savings is required. The competitive selection process can take up to 12 months.

Advantages and Disadvantages of Hiring an ESCO

Advantages

- Responsible for ensuring that the project is installed and operating according to agreed upon specifications.
- Can speed up installation so that your facility can realize the savings sooner.
- Knows what projects are cost effective and save energy.
- Can structure contract so that the savings pay for capital improvements and be off balance sheet.
- Can provide or arrange project financing.
- Is accountable for costs savings and project benefits.
- Can guarantee equipment performance and savings.

Disadvantages

- May share the savings with the ESCO.
- May require another energy audit completed by its staff even if you already have one.
- May only be expert on a particular technology or recommend their own equipment. This could compromise the objectivity of the technical analysis.
- May require that you purchase a maintenance agreement. One of the profit centers for the ESCO could be equipment maintenance.
- May increase project costs due to the need for monitoring and the risk of guaranteeing savings.

Advantages and Disadvantages of Using In-House Staff versus an ESCO

Advantages

- All benefits and energy savings go to your facility.

- You control the project from start to finish and determine which services can be done internally versus those contracted out.

Disadvantages

- You may need to spend substantial time and resources managing and overseeing the project. Multiple decision-makers could delay the project

- If technical difficulties arise, you may lack the expertise to resolve the problems. In-house expertise may not be as sound as an ESCO's.

V. WHAT ARE THE POSSIBLE PACKAGES OF SERVICES?

The following lists the services offered by most ESCOs:

- Energy audit
- Construction management
- Engineering design
- Installation
- Equipment commissioning -- verification that the equipment is operating according to the project design
- Guaranteed savings
- Arrangement of project financing
- Equipment maintenance

Most ESCOs allow you to choose among these services. A few may insist on a set package, especially if you want performance guarantees.

If your organization is unfamiliar with energy efficiency projects and uncertain about the energy savings, you may want the ESCO to perform all the services. Once you become familiar with the process and realize that energy efficiency projects pose little or no risk, however, some ESCO services could be eliminated. For instance, Alameda County contracted with an ESCO for all services, except financing, for their initial improvements. In subsequent contracts the county eliminated equipment maintenance and performance guarantees and obtained their own financing. As Alameda learned that energy efficiency projects posed little risk and the savings were always realized, they found it unnecessary to have an ESCO provide all services.

Here are three examples of possible packages:

- ***Option 1: Full Service Package***

  This includes all services listed previously in this section. It would be a good choice for those who: 1) lack available and qualified staff to manage and maintain the project and 2) need assurance that the project savings pay for the equipment debt service. This option is the most expensive -- about one third of the project costs goes toward financing and two thirds to equipment maintenance and savings verification.

- ***Option 2: No Financing and No Equipment Maintenance***

  Your organization secures the financing and maintains the equipment while the ESCO provides the remaining services listed previously. This option is a good choice for those with: 1) project financing, 2) available and qualified (or trainable) staff to do maintenance, and 3) a need for assurances that the project savings pays for the equipment debt service. Many prefer this option since the ESCO provides services that cannot be handled by your organization.

- ***Option 3: No Financing, No Guaranteed Savings and No Equipment Maintenance***

  The ESCO provides project identification, installation, construction management, engineering design and equipment commissioning. These functions are similar to those performed by an engineering firm and a construction manager.

This option is a good choice for those with financing and qualified and available maintenance staff. Organizations choosing this option are confident that the energy savings will happen and do not need a guarantee for savings. The emphasis is on a good energy audit with sound assumptions and recommendations and not on project guarantees.

VI. WHAT IS THE SELECTION PROCESS?

Public facilities can select ESCOs through competitive bid or sole source as determined by your governing board or legal counsel.

State law (Government Code, Section 4217.10 et seq.), allows public facilities to select an ESCO through sole source (Appendix B). This method can speed up project installation and reduce administrative cost for both you and the ESCO. The major disadvantage, however, is the lack of competition and ability to compare multiple proposals. You will be unable to determine whether the proposed deal is the best. Local citizens, competing ESCOs and contractors could blame your organization for using a non-competitive selection process if problems arise.

Competitive bidding allows you to compare and evaluate multiple proposals. You can select the ESCO that best meets your needs and requirements. The main disadvantage is the time and staff required to prepare the bid documents and evaluate the proposals. Competitive bid processes can take up to a year from the point of bid document preparation to final selection.

These are the typical steps in the evaluation and selection process for an ESCO:

A. Determine Project Objectives

Think of the reasons for hiring an ESCO. What objectives do you want to accomplish? What problems will be solved? Will the ESCO provide all services from energy auditing through monitoring and verification? If not, what services will they provide and what will be done by your staff? Will the ESCO help identify non-energy projects? Answering these questions early on makes it easier to develop the Request for Qualifications (RFQ) to solicit competitive bids.

B. Develop RFQ

The RFQ allows an ESCO to provide information about its past performance, technical experience and how it proposes to meet your objectives and needs. Main elements of the RFQ include:

- Description of the purpose and objective of the project, including identification of the buildings to be considered, energy use, facility size and unique needs.

- Identification of the services desired, such as energy audit, installation, construction management, engineering design, equipment commissioning, guaranteed savings, project financing, and equipment servicing.

- Explanation of how proposals will be evaluated, including the evaluation criteria and weighting factors to be used. Development of objective criteria is critical for ensuring that only the most qualified ESCO are selected.

- Listing of the project schedule.

Contact other facilities who have already contracted out for ESCO services to get samples of their RFQs. Appendix C lists such facilities. Appendix D contains a sample RFQ.

C. Release RFQ

Send the RFQ to several ESCOs to ensure that

you get a number of responses from technically qualified firms. A partial list of ESCOs is contained in Appendix A. Create your own mailing list from those in Appendix A or based on discussions with the organizations in Appendix C and others.

Have a bidder's conference within three weeks of the release date of the RFQ. At the conference you can answer questions from prospective bidders.

D. Receive responses to the RFQ

Give prospective bidders an opportunity to do a walk-through audit of your facilities. This gives the prospective bidder an idea of your project potential and helps them decide whether or not to submit a proposal.

Set a date that proposals are due -- typically six weeks after release of the RFQ.

E. Evaluate Proposals

Form a team to review and rank each proposal. The team could include members from your administrative, technical and facility staffs. Ensure that those assigned to manage and oversee the work of the ESCO are also included. Other members can include utility, state and other local government representatives. The evaluation team reviews each proposal and develops a "short list" of those that meet the minimum qualifications.

F. Conduct oral interview

Have your team interview each of the short-listed ESCOs. Performance contracting is a long-term relationship; an interview can help ascertain "partnership quality." Through the interview, the team can evaluate the ESCO's understanding of the project and its recommended approach. If the ESCO has completed a walk-through audit of the affected facilities, potential energy projects can be discussed during the interview.

G. Select an ESCO

Review each bidder's technical, financial and management experience. Evaluate the results of the oral interview and reference checks to select the ESCO that best meets your needs. Use the evaluation criteria in the RFQ to rate each ESCO. As the ESCO will be your partner for a long period, select one that shares your vision and meets your needs.

As part of the evaluation and selection process:

- Have the ESCO provide examples of when a client did not realize the full energy savings and the reasons why.
- Request and check references of past clients.
- Investigate an ESCO's organizational and financial stability and when in doubt, a performance bond to back up the guarantee may be required.[1] The cost of such bonds become part of the project cost.
- Ask your colleagues about their experiences with ESCOs on your list.

For projects with guaranteed savings, ask the ESCO:

- How it will determine baseline energy use. Have them explain the baseline operating assumptions made for each building.

- How the future energy savings will be calculated.

- If the total project savings include maintenance and other non-energy savings or if they will be based solely on energy. Maintenance and non-energy savings are difficult to quantify and substantiate unless you currently have existing contracts or documentation for the costs of these services.

- How the guarantee will be affected if the baseline conditions change in the future.

- Who will stand behind the guarantee, if the ESCO goes out of business before the contract term.

H. Approve the ESCO

Obtain the approval of your governing board for the selected company. When your board or city council approves the selection, your organization and the ESCO will sign a Letter of Intent or a Project Development Agreement.

I. Sign Letter of Intent (LOI) or Project Development Agreement

A Letter of Intent usually applies only to the preparation of the energy audit, detailing its requirements and guidelines. Sometimes a sample audit is included and the LOI requires that the ESCO prepare an audit of similar quality.

When preparing a Letter of Intent, state any special project needs or requirements, indicate the cost of the audit and the terms for payment. If you decide not to proceed with the projects recommended in the energy audit, for instance, the LOI should indicate the amount to be paid to the ESCO. Make sure that there are no clauses in the LOI that prevents you from using someone else to implement the projects.

Project development agreements or planning agreements are rapidly replacing LOIs in the ESCO business. These agreements are usually three to four pages in length and typically consist of: a) project objectives, b) energy audit requirements -- similar to those required for a LOI, and c) minimum project requirements as determined by your organization. The latter could be economic criteria, such as projects must have a simple payback of less than five years. These agreements protect your organization from having to pay for an audit that does not meet your needs.

J. Prepare Energy Audit

The energy audit identifies cost-effective energy efficiency projects. When it is complete, have your staff review it, especially maintenance and facility personnel who are responsible for equipment operations. This will:

- Ensure that assumptions, such as base year calculations, are realistic and reflect the operations of your facility.

- Verify that the recommended projects are feasible and appropriate.

K. Develop Agreement or Performance Contract.

Once the energy audit is completed to your satisfaction, develop an agreement with the ESCO to get the projects installed.

The agreement identifies the ESCO's work scope and responsibilities, from installation through training and commissioning. The agreement may also include requirements for the ESCO to provide on-going project monitoring and metering of energy savings and equipment maintenance.

If your organization requires that savings be guaranteed by the ESCO, the contract will stipulate: a) how baseline energy use will be determined, b) how the future energy savings will be calculated, and c) how the savings would be adjusted due to future changes.

Establishment of baseline energy use is one of the most important factors in the agreement since it is the basis for determining future cost savings. For accuracy, the baseline must reflect:

- Actual schedules for operation and use of space
- Actual hours of operation
- Typical weather

Since every conceivable contingency cannot be addressed in an agreement, include a re-open clause in your contract. This allows you to include additional terms in the future that are mutually agreed upon by the ESCO and your organization. A sample agreement is contained in Appendix E.

VII. WHAT CAN I DO TO ENSURE A SUCCESSFUL PROJECT?

A. ESCO Selection

- Focus on the ESCO team's technical expertise and experience -- especially in successfully identifying, installing and completing projects similar to yours. Request sample energy audits, feasibility studies and design documents from similar projects to help you evaluate their past work.

- Contact references. Are they satisfied with the energy savings and the final results? How was their experience in working with the ESCO?

- Look for companies that will be around during and after your projects are installed. Request annual financial statements to review financial capability and stability.

- Look for companies that offer choices and provide services that you want rather than a set package of services.

B. ESCO Agreement Considerations

- Do not overestimate the value of a guarantee. Savings will occur as expected when the energy audit is done well and appropriate projects are installed properly. Focus more on the experience and expertise of the individuals or firms doing the energy audit and the installation than on a guarantee of savings.

- Have the ESCO provide examples and explanations of when an organization did not realize its full energy savings.

- Recognize that if you want the guarantee, the ESCO may require that certain services be included in your agreement, such as preparation of equipment specifications and design documents, equipment maintenance and project monitoring and verification. Guarantees may also be tied to specific operating hours and requirements.

- Have the agreement put you in charge and require your approval at every step of the process.

- Stipulate who gets the savings generated during the installation period.

- Identify milestones in the agreement including:
  - Hiring subcontractors
  - Developing the energy audit
  - Identifying energy efficiency measures to implement
  - Commissioning and start-up
  - Determining monitoring and verification procedures

- Determine how you can terminate the agreement with cause and minimize the amount spent.

- Define and delineate the ESCO services and deliverables desired by your organization.

- Indicate that no payment will be made to the ESCO until all regulatory agencies have approved the installation. For hospitals, the Office of Statewide Health Planning and Development needs to approve all projects.

For public schools and community colleges, project approval may be needed from the Division of the State Architect. For all other public agencies, project approval may be needed from the appropriate local planning agency.

C. Working with the ESCO

- Pay attention to the development of the energy audit, the final design and the commissioning of the projects.

- Actively monitor the program and performance of the ESCO.

- Have your staff and others review the energy audit. The audit is the basis for future negotiations regarding guaranteed savings or performance requirements.

- Have a planned communications strategy, including progress meetings to discuss project status.

- Identify any problems with implementation, budget or regulations.

D. Outside Assistance

- Contact your utility. Many utilities have been involved in energy efficiency projects for 10 to 20 years and have staff that can provide high-quality objective support. Some offer technical and financial assistance that can compliment ESCO services.

  Some utilities can provide lists of ESCOs and assist in the review of ESCO contracts, energy audits and other technical documents. A few offer direct incentives to ESCOs that implement projects in your facilities. The incentive can be used to buy down your equipment or finance costs.

- Contact other governmental agencies.

  Recently, several public agencies have worked with ESCOs to get energy efficiency projects identified and installed. They can provide information about their own experiences, identify beneficial services, provide sample bid documents and help you review ESCO proposals. A partial list of such organizations is contained in Appendix C.

1. U. S. Department of Energy, North American Energy Measurement and Verification Protocol, March 1996

2. Energy Task Force of the Urban Consortium for Technology Initiatives and Hetch Hetchy Water and Power, Bureau of Energy Conservation, City and county of San Francisco, California, *Picking Up the Pace, An Evaluation of Energy Project Delivery Options and Financing Mechanisms, 1997*

3. Waltz, James, *Energy and Environmental Management*, "How to Marry an ESCO," September 1995, pages 23-27

APPENDIX A

PARTIAL LIST OF ENERGY SERVICES COMPANIES SERVING CALIFORNIA

Here is a partial list of Energy Services companies serving California, derived from responses received from an Energy Commission survey. The Energy Commission and the State of California make no warranty, express or implied, and assume no legal liability for information on this list. This list does not constitute an endorsement by the Energy Commission or the State of California.

As the energy services industry is dynamic, mergers and acquisitions are constantly occurring. The Energy Commission will periodically update the information on this list. The updates will be posted on the Energy Commission web site at:

www.energy.ca.gov/reports/efficiency_handbooks/P400-97-001E.PDF

Table A-1
Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Aircon Energy, Inc.	4234 N. Freeway Blvd, #100	Sacramento	CA	95834	(916) 922-2004	(916) 922-6481	aircon-energy.com
AMTRAN	2760 N. Roxbury Street	Orange	CA	92867	(800) 823-7400	(714) 283-1300	
Cal-Air, Inc. (Northern/ Central California)	4061 Seaport Boulevard	Sacramento	CA	95691	(916) 375-8405	(916) 375-8420	calair.com
Cal-Air, Inc. (Southern California)	12393 Slauson Avenue	Whittier	CA	95691	(562) 698-8301	(562) 693-4075	calair.com
Cal-Air, Inc. (Bay Area)	1555 S. Seventh St., Bldg K	San Jose	CA	95112	(408) 918-0692	(408) 489-7584	calair.com
Carrier Corporation	1431 N. Market Blvd., Suite 4	Sacramento	CA	95834	(916) 928-9500	(916) 928-9222	carrier.com
CBM Consulting, Inc.	17601 S. Denver Ave.	Gardena	CA	90248	(310) 329-0102	(310) 329-1021	cbmconsulting.com
Co-Energy Group	1050 E. Flamingo Road, Suite N136	Las Vegas	NV	89119	(702) 650-0557	(702) 650-0517	
Co-Energy Group	4811 Chippendale Drive, Suite 702	Sacramento	CA	95841	(916) 349-7676	(916) 344-8042	
Cogenex	1730 Franklin Street, Suite 201	Oakland	CA	94612	(510) 874-1424	(510) 874-1428	cogenex.com

Table A-1
Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Duke Solutions	500 S Main Street, Suite 570	Orange	CA	92868	(714) 796-4460		dukesolutions.com
Duke Solutions	2150 River Plaza Drive, Suite 210	Sacramento	CA	95833	(916) 564-3997 ext 591		dukesolutions.com
Duke Solutions	2420 Camino Ramon, Suite 225	San Ramon	CA	94583	(925) 327-7300 (800) 693-5333	(925) 327-7310	dukesolutions.com
Edison Source	13191 Crossroads Parkway North	Industry	CA	91746	(562) 463-3182	(562) 463-3051	edison-source.com
Electro-Test, Inc.	3150B E. Birch Street	Brea	CA	92821	(714) 961-2888	(714) 961-2889	electro-test.com
Electro-Test, Inc.	1320 El Capitan Drive, 4th Floor	Danville	CA	94526	(925) 824-0330 ext 305	(925) 824-0333	electro-test.com
Electro-Test, Inc.	9835 Carroll Center Rd, Suite 103	San Diego	CA	92126	(619) 695-9551	(619) 695-0861	electro-test.com
EMCOR Energy Services (NAA)	755 Sansome Street, Suite 500	San Francisco	CA	94111	(415) 434-2600 (415) 989-1700	(415) 434-2321	emcor-energy-edge.com
Energy Controls and Concepts	1758 Orange Tree	Redlands	CA	92374	(909) 335-1699	(909) 335-5715	expertlighting.com
Energy Masters International	215 N. Marengo Ave, Suite 370	Pasadena	CA	91101-1503	(626) 449-0307	(626) 449-0425	emasters.com

Table A-1
Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Energy Masters International	2779 Toranja Way	Sacramento	CA	95833-3738	(916) 927-9344	(916) 927-9300	emasters.com
Energy Masters International	750 B Street, Suite 2740	San Diego	CA	92101	(619) 615-7666	(619) 615-7663	emasters.com
Enron Energy Services	611 Anton Blvd, Suite 700	Costa Mesa	CA	92626	(714) 434-1800		enron.com
Enron Energy Services	12647 Alcosta Blvd, Suite 500	San Ramon	CA	94585	(925) 543-3703	(925) 543-3551	enron.com
Ferreira Service, Inc.	2566 Barrington Court	Hayward	CA	94545	(510) 783-9330 (800) 522-6064	(510) 783-3375	
Financial Energy Management, Inc.	3452 Gundry Avenue	Long Beach	CA	90807	(562) 989-3777	(562) 427-6279	
Honeywell	21270 Cabot Boulevard	Hayward	CA	94545	(510) 265-2030		honeywell.com
Honeywell	6 Centerpointe Drive	La Palma	CA	90623	(714) 562-3000	(714) 562-3125	honeywell.com
Honeywell	1740 Creekside Oaks Drive, Suite 150	Sacramento	CA	95833	(916) 923-7800	(916) 923-7809	honeywell.com

Table A-1
Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
J. B. Rodgers	9 Marconi	Irvine	CA	92618	(949) 829-0030	(949) 829-5902	
J. B. Rodgers	13951 North Scottsdale Rd., Suite 215	Scottsdale	AZ	85254	(800) 296-8982		
Johnson Controls	5770 Warland Drive, Suite A	Cypress	CA	90630-5030	(562) 799-8882	(562) 799-3621	jci.com
Johnson Controls	3526 Breakwater Court	Hayward	CA	94545	(510) 783-4000	(510) 785-3170	jci.com
Johnson Controls	3065 Kilgore Road	Rancho Cordova	CA	95670	(916) 635-6699	(916) 638-5672	jci.com
Johnson Controls	9550 Ridgehaven Court	San Diego	CA	92123	(619) 560-9966	(619) 560-0709	jci.com
Mesa Energy Systems, Inc.	5 Vanderbilt	Irvine	CA	92618	(949) 460-4602	(949) 460-8814	emcorgroup.com
New Energy	1000 Wilshire Blvd, Suite 500	Los Angeles	CA	90017	(213) 312-3500	(213) 312-3501	newenergy.com
New Energy	1333 N. California Blvd, Suite 470	Walnut Creek	CA	94596	(925) 256-7200	(925) 256-7274	newenergy.com

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Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Northeast Energy Services, Inc. (NORESCO)	17951 Skypark Circle, Suite M	Irvine	CA	92614	(949) 251-0220	(949) 251-0202	noresco.com
Northeast Energy Services, Inc. (NORESCO)	100 Produce Avenue, Suite L	S. San Francisco	CA	94080	(650) 589-3700	(650) 589-3750	noresco.com
Onsite Energy Corporation/Sycom	701 Palomar Airport Rd, Suite 200	Carlsbad	CA	92009	(760) 931-2400	(760) 931-2405	onsitesycom.com
Onsite Energy Corporation/Sycom	2303 Camino Ramon, Suite 280	San Ramon	CA	94583	(925) 358-4260	(925) 358-4261	onsitesycom.com
Orion Energy	1 Harbor Drive, Suite 207	Sausalito	CA	94965-2853	(415) 381-1212	(415) 331-0280	
Phillips Enterprises, Inc.	1805 Tribute Road, Suite B	Sacramento	CA	95815	(916) 922-3192	(916) 922-5311	
Planergy	1003 W. Cutting Blvd, Suite 110	Richmond	CA	94804-2028	(510) 232-0386 (800) 733-6374	(510) 232-0453	
Planetec Utility Services Co, Inc.	511 Myer Lane, Suite 12	Redondo Beach	CA	90278	(310) 376-3054	(310) 376-2054	i2us.com
Romero Management	1805 W. Avenue K, Suite 202	Lancaster	CA	93534	(661) 940-0540	(661) 940-0546	as.net/~rma

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Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Sempra Energy Services	3100 Bristol Street, Suite 100	Costa Mesa	CA	92626	(714) 850-3416	(714) 708-4301	sempra-esco.com
Sempra Energy Solutions	127 Roper Court	Encinitas	CA	92024	(760) 753-9315	(760) 753-0983	sempra-esco.com
Sempra Energy Solutions	80 N. Raymond Ave, #201	Pasadena	CA	91103	(626) 683-7501	(626) 683-3513	sempra-esco.com
Sempra Energy Solutions	5674 Stoneridge Drive, Suite 115	Pleasanton	CA	94588	(925) 460-9839	(925) 460-9831	sempra-esco.com
Sempra Energy Solutions	9855 Scranton Road, Suite 100	San Diego	CA	92121	(619) 696-2500	(619) 696-2400	sempra-esco.com
Servi-Tech Controls, Inc.	6903 Meany Avenue	Bakersfield	CA	93308	(661) 588-8050	(661) 588-0960	bizweb. lightspeed. net/stc
Servi-Tech Controls, Inc.	2480 S. Cherry Avenue	Fresno	CA	93706	(559) 264-6679	(559) 264-0841	bizweb. lightspeed. net/stc
Servi-Tech Controls, Inc.	2112 Eastman Drive, Suite 105	Ventura	CA	93003	(805) 650-4882	(805) 650-9436	bizweb. lightspeed. net/stc
Siebe Environmental Controls	1901 Betmor Lane	Anaheim	CA	92805	(714) 978-1600	(714) 938-1305	siebe-env-controls.com

Table A-1
Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Siemans Building Technologies, Inc. (Landis Division)	10775 Business Center Drive	Cypress	CA	90630	(714) 761-2200	(714) 761-2134	landisstaefa.com
Siemans Building Technologies, Inc. (Landis Division)	2525 Barrington Court	Hayward	CA	94545	(510) 783-6000 ext 266	(510) 293-2100	sbt.siemans.com
Southland Industries Services Company	1661 East 32nd Street	Long Beach	CA	92127	(562) 424-8638	(562) 490-0767	southlandind.com
Super Systems, Corp.	17561 Teachers Ave, Bldg. A	Irvine	CA	92614	(949) 786-7117	(949) 733-3430	
Syska & Hennessy (Construction Engineering & Management)	11500 W. Olympic Blvd, Suite 680	Los Angeles	CA	90064 -1524	(310) 312-0200 ext 130	(310) 312-6861	cem.syska.com
UtdTch/Carrier Corporation	17900 E. Ajax Circle	City of Industry	CA	91744	(626) 435-3006	(626) 435-3065	carrier.com
UtdTch/Carrier Corporation	7204 Clairemont Mesa Blvd.	San Diego	CA	92111	(619) 277-9790	(619) 277-9788	carrier.com
UtdTch/Carrier Corporation	10810 Bigge Street	San Leandro	CA	94577	(510) 563-5700	(510) 563-5732	carrier.com

Table A-1
Partial List of Energy Services Companies Serving California

Organization Name	Address	City	State	Zipcode	Telephone	Fax	Web-Address
Verle Williams and Associates	5820 Oberlin, Suite 101	San Diego	CA	92121	(619) 458-9121	(619) 458-1929	vawa.com
Viron Energy Services	1260 B Street, Suite 125	Hayward	CA	94541	(800) 998-7099	(510) 538-4450	viron.com
Viron Energy Services	150 E. Colorado Blvd., Suite 210	Pasadena	CA	91105	(626) 564-8204 ext 12	(626) 564-2814	viron.com
Xenergy, Incorporated	492 Ninth Street, Suite 220	Oakland	CA	94607 -4048	(510) 891-0446	(510) 891-0440	xenergy.com
Xenergy, Incorporated	16466 Bernardo Center Drive, Suite 250	San Diego	CA	92128	(619) 675-0905	(619) 675-0904	xenergy.com

APPENDIX B

CALIFORNIA STATE LAW PERTAINING TO ENERGY CONSERVATION CONTRACTS

The following is from the Government Code, Chapter 3.2, Sections 4217.10 to 4217.18.

Chapter 2.3
ENERGY CONSERVATION CONTRACTS

Section

4217.10 Energy conservation, cogeneration and alternative energy supply sources at public agency facilities.
4217.11 Definitions.
4217.12 Energy service contracts and facility ground leases; authorization; findings.
4217.13 Terms of contracts and leases.
4217.14 Contracts for sale of electricity, electrical generating capacity, or thermal energy.
4217.15 Basis for findings required as to financing and sales contracts and facility. leases.
4217.16 Agreement or lease proposals; requests; evaluations; basis contract awards.
4217.17 Public agencies' authority.
4217.18 Flexibility as to structuring of, characterizing components as realty or personalty, and granting security interests.

Chapter 3.2 was added by Stats. 1983, c. 868, §1.

Cross References

Hydroelectric alternate energy supply sources, see Water Code Appendix §84-4.13

§4217.10. Energy conservation, cogeneration and alternative energy supply sources at public agency facilities.

To help implement the policy set forth in Section 25008 of the Public Resources Code, and to extend that policy to facilities of local governments, public agencies may develop energy conservation, cogeneration, and alternate energy supply sources at the facilities of public agencies in accordance with this chapter.

§4217.11. Definitions.

The following terms, whenever used in this chapter, have the meanings given in this section, except where the context clearly indicates otherwise:

(a) “Alternate energy equipment” means equipment for the production or conversion of energy from alternate sources as its primary fuel source, such as solar, biomass, wind, geothermal, hydroelectricity under 30 megawatts, remote natural gas of less than one billion cubic feet estimated reserves per mile from an existing gas gathering line, natural gas containing 850 or fewer British Thermal Units per standard cubic foot, or any other source of energy, the efficient use of which will reduce the use of fossil or nuclear fuels.

(b) “Cogeneration equipment” means equipment for cogeneration, as defined in Section 218.5 of the Public Utilities Code.

(c) “Conservation measures” means equipment, maintenance, load management techniques and equipment, or other measures to reduce energy use or make for a more efficient use of energy.

(d) “Conservation services” means the electrical, thermal, or other energy savings resulting from conservation measures, which shall be treated as a supply of such energy.

(e) “Energy conservation facility” means alternate energy equipment, cogeneration equipment, or conservation measures located in public buildings or on land owned by public agencies.

(f) “Energy service contract” means a contract entered into by a public agency with any person, pursuant to which the person will provide electrical or thermal energy or conservation services to a public agency from an energy conservation facility.

(g) “Facility financing contract” means a contract entered into by a public agency with any person whereby the person provides financing for an energy conservation facility in exchange for repayment of the financing and all costs and expenses related thereto by the public agency. A facility financing contract may provide for the person with whom the public agency contracts to provide any combination of feasibility studies for, and design and construction of, all or part of the energy conservation facility in addition to the financing and other related services, and may provide for an installment sale purchase, another form of purchase, or amortized lease of the energy conservation facility by the public agency.

(h) “Facility ground lease” means a lease of all, or any portion of, land or a public building owned by, or under lease to, a public agency to a person in conjunction with an energy service contract or a facility financing contract. A facility ground lease may include, in addition to the land on which energy conservation facilities will be located, easements, rights-of-way, licenses, and rights of access, for the construction, use, or ownership by the person of the facility and all related utility lines not owned or controlled by the interconnecting utility, and offsite improvements related thereto. A facility ground lease may also include the addition or improvement of utility lines and equipment owned by the interconnecting utility which are necessary to permit interconnection between that utility and an energy conservation facility.

(i) “Person” means, but is not limited to, any individual, company, corporation, partnership, limited liability company, public agency, association, proprietorship, trust, joint venture, or other entity or group of entities.

(j) “Public agency” means the state, a county, city and county, city, district, community college district, school district, joint powers authority or other entity designated or created by a political subdivision relating to energy development projects, and any other political subdivision or public corporation in the state.

(k) “Public building” includes any structure, building, facility, or work which a public agency is authorized to construct or use, and automobile parking lots, landscaping, and other facilities, including furnishings and equipment, incidental to the use of any structure, building, facility, or work, and also includes the site thereof, and any easements, rights-of-way appurtenant thereto, or necessary for its full use.

§4217.12. Energy service contracts and facility ground leases; authorization; findings.

(a) Notwithstanding any other provision of law, a public agency may enter into an energy service contract and any necessarily related facility ground lease on terms that its governing body determines are in the best interests of the public agency if the determination is made at a regularly scheduled public hearing, public notice of which is given at least two weeks in advance, and if the governing body finds:

(1) That the anticipated cost to the public agency for thermal or electrical energy or conservation services provided by the energy conservation facility under the contract will be less than the anticipated marginal cost to the public agency of thermal, electrical, or other energy that would have been consumed by the public agency in the absence of those purchases.

(2) That the difference, if any, between the fair rental value for the real property subject to the facility ground lease and the agreed rent, is anticipated to be offset by below-market energy purchases or other benefits provided under the energy service contract.

(b) State agency heads may make these findings without holding a public hearing.

§4217.13. Terms of contracts and leases.

Notwithstanding any other provision of law, a public agency may enter into a facility financing contract and a facility ground lease on terms that its governing body determines are in the best interest of the public agency if the determination is made at a regularly scheduled public hearing, public notice of which is given at least two weeks in advance, and if the governing body finds that funds for the repayment of the financing or the cost of design, construction, and operation of the energy conservation facility, or both, as required by the contract, are projected to be available from revenues resulting from sales of electricity or thermal energy from the facility or

both as required by the contract, are projected to be available from revenues resulting from sales of electricity or thermal energy from the facility or from funding that otherwise would have been used for purchase of electrical, thermal, or other energy required by the public agency in the absence of the energy conservation facility, or both. State agency heads may make these findings without holding a public hearing.

§4217.14. Contracts for sale of electricity, electrical generating capacity, or thermal energy.

Notwithstanding any other provision of law, the public agency may enter into contracts for the sale of electricity, electrical generating capacity, or thermal energy produced by the energy conservation facility at such rates and on such terms as are approved by its governing body. Any such contract may provide for a commitment of firm electrical capacity.

§4217.15. Basis for findings required as to financing and sales contracts and facility. leases.

The public agency may, but is not required to, base the findings required under Sections 4217.12 and 4217.13 on projections for electrical and thermal energy rates from the following sources:

(a) The public utility which provides thermal or electrical energy to the public agency.

(b) The Public Utilities Commission.

(c) The State Energy Resources Conservation and Development Commission.

(d) The projections used by the Department of General Services for evaluating the feasibility of energy conservation facilities at state facilities located within the same public utility service area as the public agency.

§4217.16. Agreement or lease proposals; requests; evaluations; basis contract awards.

Prior to awarding or entering into an agreement or lease, the public agency may request proposals from qualified persons. After evaluating the proposals, the public agency may award the contract on the basis of the experience of the contractor, the type of technology employed by the contractor, the cost to the local agency, and any other relevant considerations. The public agency may utilize the pool of qualified energy service companies established pursuant to Section 388 of the Public Utilities Code and the procedures contained in that section in awarding the contract.

§4217.17. Public agencies' authority.

This chapter does not limit the authority of any public agency to construct energy conservation projects or to enter into other leases or contracts relating to the financing construction, operation, or use of alternate energy type facilities in any manner authorized under existing law. This chapter shall not be construed to abrogate Section 14671.6.

§4217.18. Flexibility as to structuring of, characterizing components as realty or personalty, and granting security interests.

The provisions of this chapter shall be construed to provide the greatest possible flexibility to public agencies in structuring agreements entered into hereunder so that economic benefits may be maximized and financing and other costs associated with the design and construction of alternate energy projects may be minimized. To this end, public agencies and the entities with whom they contract under this chapter should have great latitude in characterizing components of energy conservation facilities as personal or real property and in granting security interests in leasehold interests and components of the alternate energy facilities to project lenders.

APPENDIX C

PARTIAL LIST OF PUBLIC AGENCIES THAT HAVE USED ENERGY SERVICES COMPANIES AND OTHER INFORMATION ON ENERGY SERVICES COMPANIES

I. Partial List of Public Agencies that Have Used Energy Services Companies

The following contacts have experience with ESCO's:

Organization	Type of Projects	Contact	Phone
Alameda County	Lights/HVAC	Matthew Muniz	(510) 208-9518
California Polytechnic University, Pomona	Lights/HVAC	Chris McAlary	(909) 869-3026
California State University, Fresno	Lights/HVAC	Dick Smith	(559) 278-4632
Carson	HVAC	Ken Boyce	(310) 830-7600
Chabot-Los Positas Community College District	Lights/HVAC	Nick Pereira	(510) 786-6649
Clovis	Lights/HVAC	Robert Ford	(559) 297-2337
Contra Costa Community College District	Lights/HVAC	Tom Beckett	(925) 229-1000, ext. 1270
Contra Costa County	Lights	Kathy Brown	(925) 313-7100
El Monte	Lights/HVAC	Ken Ballinger	(626) 580-2250
Gardena	HVAC	Bernie Payne	(310) 217-9599
Huntington Beach City Unified School District	Lights/HVAC	Dick Masters	(714) 964-8888
Kings County	Lights/HVAC	Harry Verheul	(559) 582-3211, ext. 2690
Los Angeles County	Lights	Ken Hammer	(213) 881-3949
Long Beach	Lights/HVAC	Albert Le Bouton III	(562) 570-6216
Los Angeles Unified School District	Lights	Kim Kennedy	(213) 633-7192
Madera Community Hospital	HVAC	Bob Kelly	(559) 675-5501

Organization	Type of Projects	Contact	Phone
Manhattan Beach	HVAC	Neil Miller	(310) 545-5621, ext 380
Napa Valley College	Lights/HVAC	Daniel TerAvest	(707) 253-3340
Orange	Lights/HVAC	Jess Garcia	(714) 744-7272
Poway	Lights/HVAC	Doug Hilliker	(619) 679-5450
Riverside County	Lights/HVAC/ Windows	Bud Fish	(909) 275-4838
West Covina Unified School District	Lights/HVAC	Tom Ethridge	(818) 939-4653
Ventura County	Lights/HVAC	David Inger	(805) 654-3091

II. Additional Information on Energy Services Companies

A. The following are sources of information on ESCOs:

- Waltz, James, *Energy and Environmental Management*, "How to Marry an ESCO and Not Get Divorced," Fall 1995, pages 22-27.

- Department of Energy*, International Performance Measurement and Verification Protocol*, 1997. This document discusses procedures to quantify energy efficiency measure performance and energy savings. The protocol provides an overview of the techniques available for verifying savings from both traditionally- and third-party-financed energy and water efficiency projects. The protocol can be downloaded at the following Web Site: <www.ipmvp.org>.

- Task Force of the Urban Consortium for Technology Initiatives and Hetch Hetchy Water and Power, Bureau of Energy Conservation, City and County of San Francisco, *Picking Up the Pace, An Evaluation of Energy Project Delivery Options and Financing Mechanisms*, 1997.

- Energy Task Force of the Urban Consortium for Technology Initiatives and Hetch Hetchy Water and Power, Bureau of Energy Conservation, City and County of San Francisco, *Energy Efficiency Services in a Restructured Electric Industry*, 2000.

- Public Technology, Incorporated, *Model Request for Proposals for an Energy Services Performance Contract*, 1996, Washington, D.C.

B. In September 1996, legislation was passed (AB1890, Chapter 854, Article 9) and incorporated into the California Public Utility Code, Section 388. This legislation allows the California Department of General Services, or any other state or local agency intending to enter into an Energy Services Contract, to:

- Establish a pool of qualified energy services companies (ESCOs), and
- Award a contract through a competitive process to individuals or firms in that pool.

The California Department of General Services, Energy Assessments, has established a pool of ESCOs for use by public agencies. For information on the Energy Assessment program and the criteria used to establish the pool, please refer to their Web Site: <www.resd.dgs.ca.gov/Energy/escoservices.asp> or contact (916) 323-8777. The following list the ESCOs in the pool as of December 1999:

Aircon Energy
Co Energy Company
Electro-Test Inc.
Energy Masters International
Honeywell
Johnson Controls
Kuhn and Kuhn
Noresco
Onsite Sycom
PG&E Energy Services
Rogers Energy Services
Sempra Energy
Siebe Environmental
Siemens Building Technologies, Inc.
Southland Industries
Strategic Resource Solutions
TRC Environmental Solutions
Viron Energy Services

C. The National Association of Energy Service Companies (NAESCO) sponsors an accreditation program for ESCOs. Companies seeking NAESCO-accredited status must apply to a committee of industry experts who are unaffiliated with any particular ESCO or lighting service company. The committee examines the core competencies and business practices of the applying ESCO and consults with selected customer references. For information on the NAESCO accreditation program, please refer to their Web Site <www.naesco.org> or call (202) 822-0950. The following lists the accredited ESCOs as of December 1999:

Combined Energies
Conservation Services Group, Inc
Control Systems International
Custom Energy, L.L.C.
Emcor Energy Services
Energy Masters International
Energy Systems Group
Entergy Business Solutions
EUA Cogenex Corporation
EUA Cogenex – Canada
Exelon Energy Services
First Energy Services Corp.
FPL Energy Services, Inc.
HEC Energy Services
Honeywell Inc.
Johnson Controls, Inc.
Noresco (Northeast Energy Services, Inc.)
Onsite Sycom Energy Corporation

Parke Industries
PSEG Energy Technologies
Rose Technology Group Inc.
Sempra Energy Services
Siebe Environmental Controls
Siemens Building Technologies
Southern Company Energy Solutions
Trigen Energy
UCONS, L.L.C.
Viron Energy Services

III. Information on Feasibility Study Guide

California Energy Commission, *Guide to Preparing Feasibility Studies for Energy Efficiency Projects*, Publication Number P400-00-002, Sacramento, California. This guide provides information on the assumptions and types of analysis needed to evaluate the technical and economic feasibility of energy projects. This document will be available to download by the summer of 2000 at the following Web Site: <www.energy.ca.gov/reports/index.html#400

APPENDIX D

EXAMPLE
REQUEST FOR QUALIFICATIONS (RFQ)
TO SELECT
AN ENERGY SERVICES COMPANY
FOR ENERGY SERVICES

The following example Request for Qualifications (RFQ) was derived from the Contra Costa Community College District's and Chabot-Los Positas Community College District's RFQ for Energy Services Company (ESCO) services, the *Model Request for Proposal for Energy Services Contract* from Public Technology Incorporated (see Appendix C for information) and others. Though we have attempted to produce an RFQ that would be broadly applicable for most ESCO services, you should still tailor your document to your site-specific needs.

Sections to be customized by your organization have been highlighted. If you plan to use tax-exempt financing, shared savings arrangements violate Internal Revenue Service Code.

LEGAL NOTICE/ADVERTISEMENT

REQUEST FOR QUALIFICATIONS (RFQ) TO SELECT PERFORMANCE CONTRACTOR FOR ENGINEERING SERVICES/PERFORMANCE CONTRACTING

NOTICE IS HEREBY GIVEN that the Governing Board of __ _____California, is interested in receiving qualifications from energy services companies (ESCOs) for providing a full range of energy services and energy related capital improvements financed through a guaranteed reduction in facility operating costs at each of the following facilities: _____ _____. These services may include, but are not limited to:

- A detailed energy audit (investment grade audit)
- The design and installation of the new equipment
- Project management and commissioning
- Training in preventative maintenance and operations of existing and new equipment associated with the heating, ventilation and air conditioning systems, the lighting system, the building envelope, the domestic hot water system, and other energy using devices
- Analysis of other opportunities that would not reduce consumption but are aimed at cost savings, such as fuel switching or rate changes

The contract shall state that all costs, including professional fees and financing charges are to be paid for from the energy cost avoidance generated by the performance contracting project.

Interested companies should submit three (3) copies of its response to the RFQ at the following address, no later than 4:00 pm, . NO SUBMITTAL WILL BE RECEIVED AFTER THIS TIME. All information received will not be returned. The companies making the short list will be informed so that they may prepare for oral interviews.

Proposals are to be sent to:

_____

The complete RFQ with the pertinent information will be available on , at the above address.

The Governing Board reserves the right to request clarification of information submitted and to request additional information from the proposers.

The Governing Board reserves the right to reject any and all qualifications and/or waive any informality or irregularity in any qualification received. No submission may be withdrawn for a period of ninety (90) days after the date set for opening thereof. The Governing Board reserves the right to use any or all ideas presented. Selection or rejection of the proposal does not affect this right.

Final selection will be made in accordance with the policies and administrative directives established by our organization and applicable statutory provisions in effect.

REQUEST FOR QUALIFICATIONS (RFQ):
ENGINEERING SERVICES/
PERFORMANCE CONTRACTING

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I. SCOPE OF SERVICES

The Governing Board (hereinafter "organization") is seeking qualifications from energy services companies (hereinafter "ESCOs") for providing a full range of energy services and energy related capital improvements financed through a guaranteed reduction in facility operating costs at each of the following facilities: _____ _____. These services may include, but are not limited to:

> ***[Describe range of services such as detailed energy audits, design and project specifications, installation, construction management, commissioning, monitoring, guaranteed savings, equipment servicing, financing and training. Training and operation and maintenance duties are optional, but should be considered so that you are able to maintain and use the systems when the ESCO leaves your facility. Describe any equipment compatibility issues. The following is a sample list.***]

- A detailed energy audit (investment grade audit)
- The design and installation of the new equipment
- Project management and commissioning

- Training in preventative maintenance and operations of existing and new equipment associated with the heating, ventilation and air conditioning systems, the lighting system, the building envelope, the domestic hot water system, and other energy using devices

- Analysis of other opportunities which would not reduce consumption but are aimed at cost savings, such as fuel switching or rate changes

II. ORGANIZATIONAL OBJECTIVES

The services provided by the ESCO should have the following benefits: a) reduce energy consumption, b) upgrade equipment, c) improve building operations and maintenance and d) save costs through improved equipment performance.

Our organization's primary energy efficiency investment goal is to capitalize on energy efficiency measure (EEM) opportunities at each facility through guaranteed operation and equipment performance savings. These savings should be in the same order of magnitude as the debt service for all energy service costs in the first year and every year during the term of the project financing.

Improvements must result in a guaranteed minimum energy savings with the ESCO payments indexed to actual measured reductions in energy cost or consumption and involve no up-front costs to our organization. Payments will not begin until after the project(s) are operational and generating savings. The energy savings achieved by the installed projects need to be sufficient to cover all project costs including annual maintenance and monitoring fees for the duration of the contract term. At a minimum, the energy savings guarantee must be structured to correspond to the annual financing costs associated with the project.

> ***[Note: Do not ask ESCOs to guarantee energy cost avoidance because the future energy price can be affected by the electric industry restructuring. For agreements with no guaranteed savings, indicate the requirements for payment, such as, payment of a certain percentage upon completion of specific tasks.***]

Our organization desires to reduce the cost of the EEM investment and to avoid high interest rates of taxable capital, property taxes and/or other possible private sector project costs. Therefore, the financing arrangement with an ESCO should be structured to avoid high project costs related to financing and ownership.

The Governing Board will pursue grants and/or utility incentives to reduce project cost as technically and administratively practical to reduce the cost of the capital debt.

III. ESCO CAPABILITIES

Our organization seeks an ESCO which have demonstrated technical and managerial experience to comprehensively analyze our building energy systems and to provide a full range of energy services.

- Building energy systems include, but are not limited to, lighting, HVAC equipment and systems, domestic hot water systems, energy management and control systems.

- ESCO services include energy audits and analyses, engineering/design, installation, project management, commissioning and training.

IV. CONTRACT TERMS AND CONDITIONS

[Note: You may want to consider a multi-step process that enables you to try an ESCO on one facility or one task with a clause to use them again for other facilities or tasks, based on their initial performance. This process allows you to add on buildings or tasks through a negotiating process, rather than a separate competitive bid. The terms for adding on work and the process for negotiating the services must be delineated in the contract.

The following are some example contract terms.]

Performance contract terms will include, but are not limited to:

- Life cycle pro forma of proposed energy improvements, including annual maintenance and operating assumptions and costs

- Timetable for completing engineering and construction work

- Identification of who receives the energy the savings during the construction period

- Detailed description of services to be provided

- Specific financing arrangements and terms and how payments will be made to the ESCO

- Estimate of energy savings in kwh and/or therms

- Methodology for calculating baseline energy consumption

- Procedure for revising the consumption should the facilities' additional energy conservation features or building use change

- Requirement for a performance bond guaranteeing that the facility will be restored to the original condition in the event of default

- A provision for early buy-out of such services as the guarantee, maintenance and monitoring

- A clause specifying who will be responsible for maintaining the equipment

- A provision allowing for the disposal of the equipment at the end of the contract and special conditions offered by the company.

- A statement indicating the duration of the performance contract

The award of this contract is subject to approval by the Governing Board.

V. PROJECT PROCESS

[Note: Describe how you plan to identify, implement and monitor the projects. The following describes a sample three phase process.]

A. Phase 1

In this phase, the ESCO is selected to complete the energy audits and to identify the EEMs that will be included in the investment package. The cost of the energy audit will be a consideration in the contract agreement. If our organization does not choose to go forward with a performance contracting arrangement with the ESCO, our organization will be obligated to pay for the cost of the audits but will not be committed to continue the project with the ESCO. The audits become the property of our organization.

B. Phase II

This phase includes the long term performance contract arrangement with the ESCO and completion of the engineering, procurement and construction phases, including performance testing. Guidelines on the conditions for construction contracts are available from _____ _____ The ESCO will pay for the cost of obtaining utility rebates and/or provide the financial support required under any grant program.

Maintenance services for the energy retrofits must be specified by the ESCO. At a minimum, written equipment maintenance standards and comprehensive training of our maintenance staff in the operation of the retrofits will be required. Longer term maintenance and training needs should also be considered.

C. Phase III

The ESCO conducts the monitoring and validates the energy savings from the installed projects. The final Metering/Monitoring Plan should identify any outside resource support to be provided by our organization. Hard and soft costs for this phase should be included with the assumption that they will be paid for from energy savings.

VI. PROCUREMENT

[Describe your procurement process. The following is an example.]

The following is the process to select the ESCO and complete the energy audit and performance contract:

A. Request for Qualifications (RFQ)

An evaluation committee consisting of representatives from our organization and _____, will review each proposal based on the information submitted in response to this RFQ, and the evaluation criteria identified in Attachment B. Based on the review, the committee will identify a list of candidates that meet the minimum requirements. These candidates will complete a walk through of the selected facility to identify energy project potential and savings and will be invited for an oral interview.

B. Oral Interview

The oral interview shall include a project team presentation that describes the ESCO's technical, financial, management and legal approach to completing a comprehensive energy management project at each facility. The oral presentation will include, but not be limited to the following:

- An introduction and discussion of project team roles and responsibilities
- An understanding of each facilities energy systems, rates and operating requirements
- Identification of EEMs and/or other cost control measures that were considered and could be evaluated in more detail at each facility
- The order of magnitude of each EEMs's costs and savings

- The economic model and assumptions of how the ESCO financing, maintenance and other services would be structured over the life of the project. Use a pro forma approach. Show each facilities avoided costs and annual payments.

- An outline of the ESCO's technical audit and performance contract conditions. Include the cost proposal to do the energy audits for all facilities.

- A discussion of the project schedule and how quality control and project communication will occur.

- An explanation of how the project will be financed, how monitoring and verification of savings will interface with our system and how the savings guarantee will be calculated.

- A description of how maintenance and training of facility personnel would be accomplished.

C. Energy Audit

The Governing Board and the selected ESCO will enter into a Project Development Agreement (PDA) for completion of the energy audits in the facilities specified in this RFQ. The PDA will state:

- The objectives of the energy audit

- Energy audit requirements

- Technical and economic requirements of EEMs to be analyzed in the audit

- Conditions for acceptance of the energy audit

- Cost of the energy audit if your organization chooses not to implement the projects

D. Performance Contract

[Describe your performance contract terms and options in order to avoid lengthy "post-award" negotiations. The following are some example terms.]

Based on the results of the studies, the ESCO will propose a contract that will include:

- A description of the proposed energy improvements, including annual maintenance and operating assumptions and costs
- The timetable for completing engineering and construction work
- Identification of who receives the energy savings during the construction period
- A detailed description of services to be provided
- Specific financing arrangements and terms
- An estimate of energy savings in kWh and therms
- The methodology for calculating baseline energy consumption and cost
- A procedure for revising these costs should the building use or energy conservation features of the building change
- A requirement for a performance bond guaranteeing that the facility will be restored to the original condition in the event of default
- A provision including schedule and cost for early buy-out of such services as the guarantee, maintenance and monitoring
- A clause specifying who will be responsible for maintaining the equipment
- A provision allowing for the disposal of the equipment at the end of the contract
- Identification of any special conditions offered by the ESCO

Our organization intends to negotiate a final contract for these services, which includes a minimum savings guarantee. If an acceptable contract cannot be reached within 45 days from the date of ESCO selection, negotiations with the second ranked ESCO may be initiated.

Our organization reserves the right to reject all proposals received and further reserves the right to waive any informalities in proposals received as a result of the RFQ.

Interested companies should submit _____ copies of its response to:

_____

All information received will not be returned. The companies making the shortlist will be informed so that they may prepare for oral interviews. All submittals must be received by _____ on _____.

Questions regarding this RFQ should be directed to:

_____

VII. ESCO CONTRACT TENTATIVE SCHEDULE

_____ Advertisement and Release of Request for Qualifications
_____ Submittal of Written Qualifications
_____ Review of Qualifications
_____ Shortlist Established and Invitation for Oral Interviews
_____ Walk Through of Facilities
_____ Oral Interviews and Ranking of ESCO Proposals
_____ Negotiation and Selection of ESCO
_____ Project Development Agreement (PDA) Approved
_____ Energy Audit and Technical Analyses
_____ Performance Contract Negotiations
_____ Performance Contract Approved

Attachment A

REQUEST FOR QUALIFICATIONS
REQUIRED FORMAT

[Describe your organization's proposal requirements, including the format, content and information requested. This section includes a suggested format.]

All submittals are required to follow the format described in this section. Please respond to each category. Number and title each answer in the order posed here.

I. Cover Page

Include a cover page with the name of the RFQ, the name, address and phone number of the ESCO, and the date.

II. Transmittal Letter

Attach a transmittal letter from the principal of your company, stating your commitment to the project and highlighting your qualifications. Complete an ESCO Profile Form similar to Attachment D-1 (page D-13).

III. Table of Contents

Include a table of contents that outlines the qualifications contents.

IV. Executive Summary

Include an executive summary with an overview of your company's proposal.

Attachment D-1
ESCO Profile Form

Company Name	
Address **City** **State** **Zip Code**	
Contact Person **Phone**	
Type of Company (check one)	___ Corporation ___ Sole Ownership ___ Joint Venture ___ Partnership
Year Company was Started	
Name and Address of Parent Company (if applicable)	
Former Name(s) of Company (if applicable)	
List your annual contract amounts for energy related services for the last five years. You can use a range of contract amounts (e.g. $100,000 - $500,000)	1996 _____ 1995 _____ 1994 _____ 1993 _____ 1992 _____
Estimate dollar value of all current performance contracts	Estimated Dollars _____ As of: (Date) _____
List business and professional licenses/credentials	

The answers on this form are true and correct.

Name of Company _____

Authorized Representative _____

Title _____

Signature _____

Date _____

V. Qualifications Content

A. Project Summary

1. Describe the energy services provided by your company and those to be provided by your branch offices and/or subcontractors.

2. Describe your company's project management approach and special features. Indicate how your approach and features would be beneficial to our organization.

3. Describe your organizational and financial strength.

B. General Approach

1. Energy audits and project implementation

   a. Describe your firm's capabilities, experience and approach to preparing energy audits and implementing projects for similar facilities. Indicate experience with project design, installation, construction, project management and commissioning.

   b. Based on the information provided in this RFQ, describe any equipment modifications, replacements or control strategies you would consider installing as part of this project. Also, describe major changes in operations and maintenance or the need for specific maintenance improvements.

2. Training

   (Note: Include this section if the ESCO will be providing training services. Sample information can include the following.)

   a. Discuss your training program.

   b. Describe your experience in providing technical training for the types of EEMs to be installed as part of this project.

3. Maintenance Plan

   a. Describe how you will provide cost effective maintenance and maintain warranties on the installed EEMs on the existing facility equipment/ structure.

b. Identify and describe the roles and requirements of our facility maintenance personnel and your maintenance services.

c. Describe your capabilities and experience in providing maintenance service on EEMs. Identify specific projects, references, and contacts.

d. Describe the extent to which equipment maintenance is a profit center for your company.

4. Savings Guarantee

(Note: This section or similar will be included if a savings guarantee will be part of the services provided by the ESCO.)

Provide the terms and conditions for the Performance Guarantee.

a. Describe the procedures and schedule for measuring the project's financial performance and how the guarantee provisions work in the event the project results vary from the projections.

b. Discuss the procedure for measuring actual energy savings and the value of such savings attributable to the contracted services. List procedures, formulas, and methodologies including any special metering or equipment, your company will use to calculate energy savings.

c. Describe the method for calculating the baseline energy used at each facility before installation of the EEMs.

d. Describe the method(s) used to adjust the baseline due to changes in weather, occupancy and use, such as addition or removal of energy consuming equipment, and/or changes in the hours or level of comfort.

e. Describe the procedure for calculating the performance and energy savings as a result of installing the EEMs. Explain how to assign dollar values to the energy savings calculations. Maintenance and operation savings are not to be considered. Include calculations to determine the floor and ceiling of utility energy costs and the basis for this determination. Discuss how the baseline will be affected by future utility energy costs changes due to the electric industry restructuring.

f. Describe the method for calculating your fees based on the project's performance and energy savings. Specify how the energy savings

payment will be made, the method of allocation of savings each year, and if a cap will be placed on the total share of the savings which will go to the ESCO.

5. Project Billing and Invoice

   a. Describe your billing procedures and attach a sample project invoice.

   b. Explain how accounts will be adjusted for shortfalls or windfalls in project cash flow.

6. Project Financing

   (Note: Include this section if financing will be provided by the ESCO. The following is sample information for this section.)

   a. Describe your financing source and financial agreements and conditions and financial benefits to our organization.

   b. Discuss your firm's past ability to finance and implement projects of this size quickly and efficiently.

   c. List the longest individual and combined project simple payback in years that your company will fund.

   d. Describe your relationship with funding sources and whether funding these projects is a profit center for you.

   e. Provide a sample project pro forma that reflects all economic elements of the project.

7. Equipment Acquisition

   a. Identify and describe any business associations with equipment manufacturers/suppliers that might be specified for this project. Indicate whether these business associations provide a profit center for your company.

   b. Discuss the status of equipment ownership at contract expiration.

8. Equipment Service Responsibility

(Note: Include this section if the ESCO will be providing equipment servicing. The following is sample information for this section)

a. Describe your equipment servicing experience.

b. Describe your equipment servicing responsibility throughout the contract and at contract expiration.

c. Describe any early termination/buyout options offered by your company.

C. Company Background

1. General

a. Indicate how many years your company has been doing business under its present name.

b. Indicate the names used by your company in the past and the time known by each name.

c. State how long your company has been in the performance contracting business including a list of the number and size of similar projects completed within the last three years.

d. Discuss your company's experience with energy efficiency retrofit projects at similar facilities.

2. Personnel

a. List all individuals in your company who will be working on this project. Indicate the specific tasks that they will be assigned. Include each individuals's job classification, academic degrees, professional registration, areas of responsibility and percentage of time on a monthly basis that the individual will work on the project. Indicate who will have primary technical responsibility for analysis and design work and those that have responsibility for contract negotiations.

b. Describe the relevant experience of each technical staff including the number of years of design, construction and supervisory experience. Provide a list of all projects that each individual has been associated

during the past three years, including the type of project and its dollar value.

c. For subcontracted work, provide the same information as items 2a. and 2b. for each subcontractor.

d. Provide key personnel resumes of all staff and subcontractors.

3. Management Structure

a. Describe your company's organizational structure, the management approach for this project and how the project's success will be assured.

b. Discuss the mechanism to guarantee use of local support services.

c. Provide information on how your company would ensure that the project is on schedule and within the agreed budget.

4. Financial - Attach a copy of the following:

a. Most recent audited financial report.

b. Most recent year-ending Statement of Financial Condition, or other appropriate Financial Statements.

D. Past Projects

1. Describe your company's past energy performance contracting experience involving buildings or facilities similar to those described in this RFQ. Provide a representative sample of the following:

a. Sample Energy Audit

i. Provide a copy of a previously completed energy audit for a similar facility completed by the person(s) responsible for the project technical design. This audit must include detailed energy, engineering and economic calculations. Include the status of the recommended projects.

ii. Include the energy audit approach, time frame and costs by facility.

b. Sample Agreements/Contracts

Attach sample agreements, such as Project Development Agreements and Letters of Intent, and performance contracts for past projects. These sample documents should be similar in scope to the project described in this RFQ and be representative of the agreement or contract for this project. Include sample agreements or contracts for comprehensive services and for targeted or limited services (e.g., unbundled services).

c. Project Reporting

Describe the types of reports and information management systems used in the management of similar projects. Attach examples of the progress or project reports to your past clients.

d. Scheduling

Describe how you will keep the project on schedule and how you will coordinate project construction with utilities, subcontractors, suppliers and facility personnel. Justify with past experience.

E. References

Select three completed projects each for the following team members: a) your team's project manager, b) the mechanical (HVAC) design engineer, and c) the electrical (lighting) design engineer assigned to this project. The selected projects must be similar to those proposed for our facility and must include HVAC and lighting retrofit energy savings equipment. The specific information to be provided for each project include:

a. Project title and location

b. Nature of your company's responsibility

c. Total contract amount

d. Type of services included with the contract, e.g., guaranteed savings, equipment servicing, training, etc.

e. Owner/user name, address and phone number of contact

f. Projected and actual start and end dates

g. Projected and actual project costs for equipment and services

h. Beginning energy consumption (site BTU/ft^2/yr)

i. Actual and projected ending energy consumption (site BTU/ft^2/yr)

j. Percent of project completed

F. Legal/Contractual Experience

1. Discuss whether your company has ever failed to complete a contract and indicate the circumstances leading to the project failure.

2. Discuss whether your company ever failed to meet the energy savings specified in the energy audit or in your performance contract and indicate the circumstance.

3. List all legal or administrative proceedings that are pending or have been concluded adversely against your company within the last five years. Identify all that are related to procurement and performance of public or private construction contracts.

G. Additional Information

1. Describe your flexibility to unbundle the following services:

   a. Guaranteed savings
   b. Monitoring and verification
   c. Equipment servicing

2. Indicate the percentage reduction in overall project cost for each item that is unbundled or not part of the contract.

3. If our organization cancels the guarantee of savings, monitoring and verification and/or equipment servicing during the contract period, indicate the cost to our organization.

4. If our organization installs additional or higher energy efficiency equipment to the affected buildings during the term of the contract, indicate how the baseline will be re-calculated and any costs to our organization.

5. Indicate other information to be considered by the selection committee.

Attachment B

MINIMUM PROJECT TERMS AND CONDITIONS

[Discuss the minimum contract conditions required by your Governing organization. This section includes suggested information which should be modified to meet your requirements.]

This section describes the minimum terms and conditions acceptable to our Governing Board. ESCO proposals should validate concurrence with these conditions. Unacceptable conditions should be identified with a written reason.

I. Technical Requirements

A. Energy Audit

1. Upon contract award, the ESCO shall perform an energy audit of the specified facilities. The audit must be of acceptable quality to our Governing Board. Attachment C identifies the minimum energy audit specifications.

2. Our organization shall have _____ working days in which to accept the energy audit or to request changes or additions to it. If we request changes or additions, we will negotiate said changes in good faith. If the parties cannot agree to the content of the audit within _____ working days from the date the request for change is made, the Governing Board, at its sole discretion, may cancel negotiations with the ESCO, terminate the contract, and enter negotiations with the second ranked ESCO.

   The Governing Board reserves the right to refuse payment of the energy audit if:

   a. The energy savings in the energy audit vary by more than 15 percent from the estimated savings in the ESCOs proposal,

   b. The audit does not meet the objectives previously set forth in this RFQ, or

   c. An independent engineer determines the energy audit is not of acceptable quality.

3. If the Governing Board decides not to enter into the implementation phase of the project with the selected ESCO, the Governing Board agrees to pay the cost of the energy audit, as set forth in the

_____ (Project Development Agreement) provided that: 1) energy audit is accepted by the Governing Board and 2) the energy audit meets all of the conditions set forth in this RFQ.

B. Specific standards of comfort will be defined and must be maintained throughout the term of the contract.

1. For all HVAC projects:

   a. The conditioned air temperature will be maintained at _____ for cooling and _____ for heating.

   b. The required air changes per hour must be maintained at levels specified in ASHRAE 62-1989, or succeeding versions.

2. For all lighting projects, lighting conditions must be maintained at levels required by the California Energy Commission under Title 24.

   [Note: Indicate any unique needs of the occupants, and use of Illuminating Engineering Society recommendations.]

C. Minimum Guaranteed Savings Levels

The minimum level of combined performance and energy savings as a result of installing the EEMs must be guaranteed to service our debt.

D. ESCO employee responsibilities

1. A State of California registered professional engineer must, at a minimum, review and approve all design work.

2. A project manager, acceptable to our organization, will be assigned and be responsible for all phases of this project through the contract term. The project manager will be:

   a. Available as frequently as required by our organization

   b. Responsible for submitting all progress reports

3. All project workmen shall be trained and supervised. Proper care must be taken in and around the project site. The ESCO will be responsible for any damage or breakage to the facility caused by the installation directly related to a workman's fault.

4. The ESCO will be required to provide uniforms for all personnel with the company's name prominently displayed. Identification cards shall be worn by installation personnel at all times.

E. Guaranteed savings

(Note: Include this section or similar if guaranteeing the savings is part of your required services.)

The Governing Board requires a minimum guaranteed savings approach to the project. The guarantee must be in the form of a savings warranty policy, performance bond, or other document acceptable to our Governing Board.

F. Equipment maintenance

[Note: If the ESCO will provide maintenance for all installed items through the entire contract term specify the ESCO's responsibilities. The following are some examples.]

The ESCO will:

1. Work with current building management and maintenance personnel to coordinate construction.

2. Provide detailed written preventive maintenance work protocols and check lists as part of the training.

3. Provide standard industry warranties or a minimum of one year warranties, whichever is greater, on all equipment installed.

4. Provide O&M training to our organization's maintenance personnel in the operation, care and maintenance of the installed equipment.

5. Not install equipment which requires our organization to hire additional personnel to operate and maintain.

G. Project scheduling

Prior to the start of each facility, the ESCO will provide detailed scheduling for each project. The schedule shall include project start date, identification of affected areas, progress completion percentages, expected completion dates, next area or building start-up and project completion dates.

H. Drawings and Operating Manuals

The ESCO will:

1. Provide a mylar record set of as-built drawings and AUTO-CAD draft drawings showing the existing and modified conditions. Each set shall include architectural, mechanical, electrical, wiring, structural, and control drawings. All drawings must conform to engineering standards.

2. Submit the drawings and operating manuals within 30 days of the completed installation.

II. Contractual Provisions

A. Proposal and Work Scope

1. The contents of the ESCO's proposal becomes part of the final contract.

2. The Governing Board retains final approval over the work scope.

B. Project Milestones

The ESCO must provide a final schedule of project milestones including equipment servicing provisions which will become part of the final contract. In the event any milestone or equipment servicing provision is not met as scheduled, without prior approval, the Governing Board reserves the right to consider it as a default and withdraw from all contractual obligations without penalty.

C. Payment and Performance Bond

Upon acceptance of the energy audit by the Governing Board, the ESCO shall furnish a payment bond and performance bonds in the amount equal to 100 percent of the proposal bid for: a) faithful performance of the contract and the recommendations in the energy audit, b) employment of all persons performing labor and furnishing materials in connection therewith, and c) guaranteeing that the facility will be restored to its original condition in the event that the ESCO is found to be in default. The Attorney-in-fact who signs the bonds must file with the bonds a certificate and effective date copy of power of attorney. The language in the bonds should accommodate work in phases and work in progress.

D. Compliance with Codes

[Discuss any special conditions or codes that are required by your organization.]

For all services provided in this contract, the ESCO must comply with _____.

E. Record Keeping/Testing

Upon request by our organization, the ESCO will:

1. Give us access to books, records, and other compilations of data that pertain to the performance of the provisions and requirements of this agreement.

2. Give us the right to inspect, test and approve the work conducted in the facility during construction and operations. Records shall be kept on a generally recognized accounting basis and calculations kept on file in legible form.

F. Levels of Comfort

The ESCO will be responsible for maintaining the levels of comfort for each building as specified in the contract. Persistent failure to maintain the defined climate and lighting conditions will constitute a default.

G. Energy Savings Monitoring

(Note: This section is to be included if guaranteed savings will be provided. The following is an example of the information for this section)

a. The ESCO will provide quarterly energy savings reports to our organization's project manager. These reports will show the calculation of the energy savings and cost avoidance. The ESCO will include in its proposal an allowance of $ _____ to fund an independent review of any quarterly monitoring reports, that may be disputed.

b. With each quarterly report, the ESCO will provide the methodology used to: 1) measure and verify energy savings, 2) calculate base line energy consumption and costs, and 3) revise consumption and costs due to changes in the facility's energy or building use.

H. Ownership of Drawings and Reports

All drawings, reports and materials prepared by the ESCO in performance of the contract shall become the property of our organization and be delivered to our organization, when requested or upon contract termination. The ESCO is to keep all documentation pertinent to the project for _____ years after contract termination.

I. Flexibility

The contract must contain a mutually agreeable clause whereby unanticipated changes in utility rates or in a building's occupancy or use can be accommodated in a manner agreeable to both parties.

J. Indemnification

The ESCO agrees to indemnify our organization from all claims arising out of any claimed infringement of patent, copyright or other ownership rights in any material or process used by the ESCO in its work.

K. Contract Assignment

The ESCO shall not assign, transfer or convey the contract or any part of it without the prior written consent of the Governing Board. In the event of merger or takeover of the ESCO, the obligations of the contract shall be binding on the successor.

L. Unrecoverable Program Costs

If there are any outstanding program costs not regained through energy savings, it will be the responsibility of the ESCO to terminate the program, remove the equipment and restore the facility to its original condition, all without cost to our organization, and refund our organization the difference between the actual savings and program costs.

M. Future Maintenance

[Note: Discuss who will be responsible for maintaining the installed equipment, disposing of equipment at the end of the project. Specify conditions for early buy-out or termination of any ESCO services (e.g., guarantee, maintenance).]

Attachment C

SELECTION PROCEDURE

[Note: This section provides an example of an evaluation and selection process. You can modify this section to meet the needs and requirements of your organization.]

I. Completeness

Each response to this Request for Qualifications (RFQ) will be reviewed prior to the selection process for completeness and adherence to the required format (Attachment A). A response will be considered complete if all identified sections are addressed and included in the established order.

II. Shortlisting

Each qualification will be reviewed and selected companies will be placed on a shortlist based on their responses to this RFQ. The responses which are not on the shortlist will receive no further consideration. Our organization reserves the right to judge and shortlist any number of responses based on their merit.

A. Grading System

The Corporate Letter, Executive Summary, Qualifications Content and Validation of Minimum Project Terms and Conditions of each response will be reviewed to determine if the response: (a) provides the requested information and (b) demonstrates that the respondent has the required capability and experience, as evidenced by their command of the subject matter.

The responses will be ranked according to the total number of Sections that receive passing grades. Based on the number and quality of the responses, the shortlist of ESCOs will be developed. The "Shortlisting Evaluation Form" on page D-28 will be used for this purpose.

B. Notification

After the shortlist is finalized, all companies will be notified. Those shortlisted will receive instructions about the schedule for oral interviews and site visits.

SHORTLISTING EVALUATION FORM EXAMPLE

Name of ESCO:			
Section	**Complete (Yes/No)**	**Pass**	**Fail**
Cover Page			
Corporate Letter			
Table of Contents			
Executive Summary			
Qualifications Content			
Validation of Minimum Project Terms and Conditions			

III. Formal Evaluation of Shortlisted RFQ Responses

A. Evaluation Process

The evaluation process will objectively review and score all shortlisted bidders based on their merit and responsiveness. Responses will be based on the submitted written information and not on the basis of what is inferred.

B. Evaluation Criteria

Table D-2 shows the point value associated with each of the following criteria.

1. Project Management

    a. Clear assignment of responsibility for various project tasks to specific individuals. Assignment of qualified individuals to fulfill designated responsibilities.

    b. Percentage of time key personnel is assigned to the project.

    c. Ability to manage construction, repairs, regular service, and emergencies effectively.

    d. Demonstrated ability to adhere to project schedules and complete all phases on schedule.

e. Responsiveness to the specific objectives and concerns in the Request for Qualifications.

f. Quality of communication skills with the ESCO's representatives at the oral interviews.

g. Ability to coordinate project construction with local utilities, subcontractors, equipment suppliers and facility personnel.

h. Experience with training organizational staff and quality of ESCO trainers.

2. Technical Approach

a. Understanding of the existing building conditions, systems, operations, and schedules

b. Demonstrated experience of the ESCO team with audits, design documents, construction and project management, energy efficiency project installation, commissioning, training and monitoring

c. Experience of the company with energy efficiency retrofit projects on similar facilities

d. Quality and pertinence of sample energy audits showing knowledge and understanding of energy efficiency measures for similar type facilities

e. Reliability of equipment performance of ESCO's past retrofit projects.

f. Documented energy and performance savings and budget control for previous retrofit projects managed by the ESCO

g. Comprehensiveness of the technical approach and the proposed improvements

h. Energy savings calculations

i. Quality and reasonableness of the calculation methodology for the baseline energy use and for establishing the floor and ceiling on utility energy costs

ii. Clarity of the methodology

j. Reasonableness of control strategies and equipment and maintenance practices to enhance project performance and to respond to changes in utility rates, technology, and building conditions.

k. Ability to integrate energy use monitoring and verification software/ hardware with organizational requirements. *[Note: only if monitoring is to be provided.]*

3. Financial approach

a. Financial soundness and stability of the ESCO.

b. Completeness of most recent audited financial report.

c. Demonstrated ability to provide or arrange project financing. *[Note: Only if financing is provided or secured.]*

d. Soundness and cost-effectiveness of proposed financing arrangement.

e. Clarity and reasonableness of the method for reconciling accounts for adjusting windfalls/shortfalls in project cash flow.

f. Potential net financial benefit to our organization.

g. Clarity of sample project invoice.

4. Legal/Contractual Approach

a. Explanation of the reasons for past projects being incomplete or not meeting their targeted energy savings.

b. Explanation of the circumstances involving past or current legal or administrative adverse actions.

c. Flexibility of contractual provisions to accommodate changes in building energy use, utility rates, occupancy, and operating schedules.

d. Flexibility of legal agreements to accommodate needs of our organization.

e. Quality and reasonableness of provisions for early termination of the contract at the initiative of either party.

Table D-2
Evaluation Criteria and Points
(References will be considered throughout the scoring process)

MAXIMUM POINT VALUES PER CRITERION		
Criterion	**Point Value**	**Total Points**
1. Project Management		80
a. Assignment of appropriate staff	10	
b. Time allocated by key personnel	10	
c. Ability to manage construction, repairs, regular service and emergencies effectively	10	
d. Ability to meet project schedules	10	
e. Responsiveness to specific objectives and concerns in the RFQ	10	
f. Quality of communication skills	10	
g. Ability to coordinate project construction with utilities, subcontractors, equipment suppliers and facility personnel	10	
h. Experience with training staff	10	
2. Technical Approach		175
a. Understanding of organization's facilities and concerns	10	
b. Demonstrated experience of ESCO team with preparing energy audits and design, construction/project management, project installation, commissioning, training and monitoring	40	
c. Experience of the ESCO team with energy efficiency retrofit projects on similar facilities	20	
d. Quality and pertinence of sample energy audits showing knowledge of energy efficiency measures	10	

MAXIMUM POINT VALUES PER CRITERION		
Criterion	**Point Value**	**Total Points**
Technical Approach (continued)		
e. Reliability of equipment performance of ESCO's past retrofit projects	20	
f. Documented energy and performance savings, budget control for previous retrofit projects	20	
g. Comprehensiveness of approach	10	
h. Energy savings calculations i. Quality and reasonableness of the calculation methodology ii Clarity of the methodology	 10 20	
j. Reasonableness of control strategies to enhance project performance	10	
k. Ability to integrate energy use monitoring and verification software/hardware with organizational requirements	5	
3. Financial Approach		65
a. ESCO Financial Strength	20	
b. Completeness of recent audited financial report	10	
c. Demonstrated ability to provide or arrange project financing	5	
d. Soundness and cost-effectiveness of proposed financing arrangement	10	
e. Clarity and reasonableness of the method for reconciling accounts	5	
f. Potential financial benefits to our organization	10	
g. Clarity of sample project invoice	5	

MAXIMUM POINT VALUES PER CRITERION		
Criterion	**Point Value**	**Total Points**
4. Legal/Contractual Approach		90
a. Contractual flexibility to accommodate changes in building energy use, utility rates, occupancy and operating schedules	20	
b. Contractual flexibility to accommodate needs of our organization	20	
c. Quality and reasonableness of provisions for early termination of the contract	20	
d. Reasonableness of the causes for incomplete projects or project failures	10	
e. No past or current legal or administrative adverse actions	20	
Grand Total	410	

C. Point Consideration

[Note: Discuss how your organization will grade each of the criteria. The following is a sample methodology.]

The Evaluation Committee will award points based on the following considerations:

1. **Fail**: 0-49 percent of the maximum points for the criterion
2. **Below Average**: 50-59 percent of the maximum points for the criterion
3. **Average:** 60-69 percent of maximum points for the criterion
4. **Above Average:** 70-89 percent of the maximum points for the criterion
5. **Exceptional:** 90-100 percent of maximum points for the criterion

The maximum possible score is ____ points.

D. Oral Interview

The oral interview will address specific issues with the shortlisted respondents as indicated on page D-34. A major objective of the oral interview is to determine the partnership value of the ESCO. Table D-3 shows some example criteria and their point values. The respondent's answers will be graded using the same format as the formal evaluation of the RFQ responses. The maximum possible score for the oral interview will be ___ points.

Table D-3
Criteria and Points—Oral Interview

MAXIMUM POINT VALUES PER CRITERION (Oral Interview)		
Criterion	**Point Value**	Point Total
Quality of answers	10	
Quality of presentation	10	
Explanation of approach to the work scope	10	
Ability to be a partner	20	
Total	50	

E. Technical Selection

The grand total scores of the RFQ response and the oral interview will be summed. The top respondent with the highest score will move into the negotiations phase. Cost is only one facet of the negotiations. Other negotiation areas include ESCO indemnification and liquidated damages. If the negotiations fail with the highest ranking company, negotiations will go to the next highest ranking company.

F. Summary Sheet

A summary sheet of the total scores for all shortlisted companies will be made available to interested parties, if requested.

Attachment D

ENERGY AUDIT REQUIREMENTS

[Refer to the Commission's Energy Audit Guidelines (see Appendix C, page C-2) or provide your own guidelines or sample energy audit that you want the ESCO to follow.]

Attachment E

FACILITY DESCRIPTION

[The information in this attachment is to be completed by your organization. This attachment provides information to prospective ESCOs regarding your facilities.]

This attachment will describe the buildings and facilities that are candidates for energy efficiency improvements.

I. General Facility Information

A. Indicate building name and address.
B. Indicate year built and dates of last major remodel.
C. Describe any major energy related changes in the last four years.
D. Discuss any plans for building, use or occupancy changes.

II. Physical Data

A. Indicate total square footage of conditioned (heated and/or cooled) space.
B Identify number of stories.

III. Operating Data

A. Describe the operating hours of the building.
B. Discuss any special temperature, humidity or ventilation requirements.

IV. Energy Equipment Data

A. Describe the major types of HVAC systems for your buildings, including the size and age of the equipment and how the equipment is controlled.

B. Describe the different lighting systems including the annual operating hours and how the equipment is controlled.

C. Describe the domestic hot water system, distribution and control system.

D. Describe any special energy using operations, such as laundry, food preparation, pools, computer rooms and medical equipment.

E. Discuss any equipment problems or needs. Identify any mechanical or electrical systems scheduled for replacement during the next five years.

F. Identify any specific energy efficiency projects you would like evaluated as part of this project. Indicate whether these other projects were evaluated in past audits and studies.

V. Energy Consumption

A. Summarize monthly electric, gas and other energy consumption and costs for the past three years.

VI. Maintenance

A. Describe your maintenance plan and schedule for all energy using equipment. Indicate who does the maintenance. If maintenance is done by outside firms, describe exactly what service is actually provided.

B. Discuss any maintenance difficulties.

APPENDIX E

EXAMPLE
ENERGY SERVICES COMPANY AGREEMENT

The following is an example of an Energy Services Company agreement for the following services: energy audit, construction management, project monitoring and guarantee savings. It was derived from the Contra Costa Community College District's Agreement and the County of Alameda's Agreement with an ESCO and is provided as an example to be modified to the services desired by your organization.

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SCHEDULES (Not Included)

A: Description of Customer Premises
B: Description of Equipment to be Installed
C: Baseline Natural Gas, Electricity and other Fuel Consumption
D: Formula for Measuring Energy Consumption and Expenses Savings
E: Description of Standard of Service and Comfort
F: Certificate of Acceptance
G: Annual Program Cost, Base Fee and Monitoring Fee
H: Operation and Maintenance Procedures to be Followed by Customer
I: Identification of Total Project Cost, Anticipated Utility Rebates and Total Capitalized Cost
J: Description of Training Program
K: Description of Performance Standards

SAMPLE ENERGY MANAGEMENT AGREEMENT

This Agreement (hereafter the "Agreement") is made and entered into as of this day of ____ , 19____ by and between _____ having its principal offices at _____, (hereinafter, "Company") and, _____ having its principal offices at _____, (hereinafter, "Customer"), for the purpose of providing services designed to reduce Customer's energy consumption and guaranteeing a minimum level of energy and maintenance savings at the Customer's facilities (hereinafter the "Premises," which are described in Schedule A attached hereto).

RECITALS:

WHEREAS the Company has developed or become knowledgeable about certain procedures for controlling energy consumption through use of engineering analyses and devices installed and maintained on the premises of its customers; and

WHEREAS the Company has made a preliminary assessment of the energy consumption characteristics of the Premises, which Customer has reviewed and accepted, and the Company is willing to design, manage the installation of, and monitor upon portions of the Premises certain equipment of the type or class described in Schedule B attached hereto and made a part hereof, which description, after approval by Customer, is subject to revision (by addition or deletion) with mutual agreement of the Company and Customer, at a later date on a supplemental schedule or schedules as hereinafter described (all such equipment hereinafter collectively referred to as "Equipment"); and

WHEREAS Customer desires to retain the Company to evaluate, design and manage the installation of the improvements and to provide system commissioning, training, monitoring, verification of savings, and other services, as more fully set forth herein; and

WHEREAS Customer desires to enter into a contract with the Company to achieve energy and maintenance cost reductions within said buildings, subject to terms and conditions of the Agreement; and for other good and valuable consideration, the parties hereto, intending to be legally bound, hereby incorporate the recitals set forth above as though fully set forth here at and further, the parties agree as follows:

Section 1 Comprehensive Energy Audit and Finalization of Agreements

Section 1.1 Comprehensive Energy Audit

The Company has prepared a comprehensive energy audit (EA) which has been reviewed and accepted by Customer. Customer provided its complete cooperation in connection with the preparation of the EA. The Company has presented to Customer the written EA

and has prepared a Comprehensive Energy Management Plan (CEMP). To assist the Company in preparation of the EA and the CEMP, Customer has furnished (or caused its energy suppliers to furnish) to Company, upon its request, accurate and complete data concerning energy usage for the Premises, including the following data for the most current thirty-six (36) month period: utility records; occupancy information; descriptions of any changes in the building structure or its heating, cooling, lighting or other systems or energy requirements; descriptions of all energy consuming or saving equipment used on the Premises; and description of energy management procedures presently utilized.

The CEMP sets forth the following:

(a) A list of the Equipment that Company believes can reduce energy consumption and maintenance expense at the Premises and intends to manage the installation of on the Premises. The Equipment is described on Schedule B, attached hereto;

(b) The establishment of a baseline for all current energy for a typical twelve month period. This baseline will be based on average historical data provided by the Customer. The baseline is described in Schedule C, attached hereto;

(c) The formula by which Company will measure the energy consumption and expense savings at the Premises. The formula is described in Section 9 and the base energy rate is described in Schedule D, attached hereto;

(d) A description of the standard of service and comfort (level of heating, lighting, cooling, etc.) to be maintained at the Premises. The standard is described in Section 7 and the description is forth in Schedule E, attached hereto; and,

(e) If requested by the Customer, a form of equipment lease acceptable to Customer as a California public entity (the "Lease Agreement") between Customer and a reputable leasing company for the financing of the acquisition of the Equipment by Customer. The Lease Agreement will also cover other Customer's costs incurred hereunder. The Lease Agreement shall run for a term of 10 years from the Commencement Date (as defined in Section 8 hereof) and shall be coterminous with this Agreement.

(f) The requirement that the Company provide a form of energy savings performance payment insurance policy, or other form of assurance of the guaranteed avoided energy use cost performance payment acceptable to Customer.

Section 1.2 Changes to CEMP

(a) If Customer requests changes to any of the Schedules (B though _), or to the Lease Agreement, the parties shall in good faith negotiate the requested changes

and shall modify the Schedules and/or the Lease Agreement, accordingly. If the parties cannot agree within thirty (30) days after Customer's receipt of the CEMP, this Agreement may be terminated by Customer. At this point, Customer will pay for the CEMP and EA. Customer will be entitled to utilize the EA and CEMP for its benefit after termination of theAgreement.

(b) Customer has the option to expand the program to include additional energy efficiency measures (EEMs), provided that these measures are mutually agreed upon with the Company. At such time, Schedules B- __ will be modified to show the effect of the new EEMs. The revised Schedules B- __ will be mutually agreed upon by the Parties.

Section 1.3 Adoption of CEMP

Upon execution of this Agreement, the Customer hereby accepts and adopts the CEMP, including Schedules B through __ and incorporating any modifications mutually agreed per Section 1.2 above.

Section 2 Execution of Lease Agreement

Once the parties have mutually agreed on the contents of the Schedules, the CEMP and the Lease Agreement as described in 1.1 (e) hereof, Customer shall execute the Lease Agreement with the financing entity (the "Lessor").

The capital amount of the Lease Agreement will be for the Total Capitalized Cost, which is comprised of the Total Project Cost less utility rebates which are received by the Customer, plus any additional equipment authorized by change order per this Section 2.

The Total Project Cost, anticipated utility rebates, and Total Capitalized Cost are all set forth in Schedule I.

It is understood and agreed by the parties, however, that the amount of Total Project Cost may vary depending upon actual bids received from installation subcontractors. Notwithstanding the above, the Total Project Cost will neither exceed the amount set forth in Schedule I by more than 10 percent, nor will it be increased enough so as to cause predicted avoided cost surplus for year one, as set forth in Schedule G, to be a negative number.

The amount set forth in Schedule I for anticipated utility rebates is an estimated number prepared by the Company. Customer understands and agrees, however, that the Company is not responsible for the amount of rebates it actually receives, if any, and that the Total Capitalized Cost may vary accordingly.

Customer may elect for the Company to provide additional equipment beyond the Equipment set forth in this Agreement. If so, this will be confirmed in writing by the Customer with a change order. The capital cost of said additional equipment may be included under the Lease Agreement, in addition to the Total Capitalized Cost, but will not be considered as part of the Total Capitalized Cost or as part of the Program Cost, as defined in Section 9.

Section 3 Equipment Installation and Payment

a. Within 365 days after Schedules B through __ become a part of this Agreement and the Customer has executed this Agreement and the Lease Agreement as described in Section 2, the Company shall complete design of and manage the installation of the Equipment (including, if necessary, connection of the Equipment to an electronic remote monitoring system). Design work shall be performed under the responsible supervision of California registered professional engineers. The Company is responsible for obtaining and paying for all required permits and inspections. The Customer shall use its best efforts to assist the Company in obtaining all necessary permits and approvals for installation of the Equipment.

b. The Company shall submit to the Customer for approval, not less than sixty (60) days before the start of installation, all Equipment to be installed. Within thirty (30) days after receiving the submittal, the Customer will inform the Company in writing whether the Equipment is approved or rejected. If rejected the Company shall re-submit alternate Equipment until approved.

c. Installation shall incorporate system commissioning, including a performance test consistent with Schedule K, and training of Customer personnel consistent with the description in Schedule J. If Customer is in agreement that the Equipment is substantially installed and operational, then Customer shall execute a Certificate of Acceptance in substantially the same form as Schedule F attached to the Agreement and incorporated herein.

d. The Company shall submit interim monthly billings and reports. The interim billing amounts will be as specified by the Customer's financier and will result in a positive cash flow for the customer. The interim billings will cover the costs of engineering, management, equipment and installation, training, and system commissioning during the design and construction period. Customer shall pay same promptly, but always within _____ working days of receipt, provided that the aggregate amount of such payments does not exceed the sum of _____, which is the Total Project Cost, as set forth in Schedule I, unless this amount is modified under the terms set forth in Section 2, or as otherwise mutually agreed by the parties.

e. Upon payment in full for the Equipment, the Company shall thereupon have no further title to, interest in or lien on the Equipment, and shall execute a bill of sale or other documents requested by Customer transferring title of the Equipment to Customer (or to Lessor, if so required under the terms of the Lease Agreement).

Section 4 Equipment Location and Access

Customer shall provide mutually satisfactory rent-free space for the installation and operation of the Equipment. Customer shall provide access to the Premises for the Company and contractors or subcontractors to design, install, adjust, inspect and monitor the Equipment during regular business hours on regular working days except as required to have no interruption of the Customer's activities. Access will also be provided at such other hours as may be requested by the Company and acceptable to Customer.

Portions of the lighting retrofits may be performed during unoccupied or non-peak periods. This may include nights and weekends which will not be considered overtime. Any overtime or additional expenses to be charged to the Customer by the Company must be pre-approved in advance and in writing prior to proceeding with the additional costs.

The Company's access to correct any emergency condition shall not be restricted by Customer. Customer, at its expense, will provide a dedicated phone line at each designated location of the premises for remote monitoring of certain heating and air conditioning and lighting systems.

Section 5 Equipment Service

Section 5.1: Actions by the Company

Customer shall operate, service and maintain the Equipment, except that service and maintenance during the one year warranty period, or any other longer warranty periods so provided from individual manufacturers or subcontractors, will be the responsibility of the Company.

The Company shall prepare, to the satisfaction of the Customer, Operating and Maintenance manuals for all of the Equipment. These manuals shall specify parameters within which Customer personnel can operate, maintain, adjust and alter the equipment for optimum operation consistent with energy conservation objectives and human comfort needs.

Individually bound manuals shall be prepared for each specific site. Operating manuals shall include B-size "as-built" mechanical and control drawings for the installed Equipment. The Company shall furnish to the Customer five (5) copies of all such

manuals on or before the commencement of the training of the Customer's personnel which the Company will provide as described in Schedule J.

Preventative maintenance check lists regarding Customer's operation and maintenance procedures are set forth in Schedule H and have been agreed to by both parties. The Company will perform periodic on-site evaluations of the Equipment, and the service and operation thereof by Customer, no less than annually.

Section 5.2: Malfunctions and Emergencies

Customer shall notify the Company within twenty-four (24) hours if it knows of (i) any malfunction in the operation of the Equipment or (ii) any interruption or alteration of the energy supply to the Premises. Customer shall notify the Company forthwith upon determination of the existence of any emergency or dangerous condition affecting the Equipment. The Company will not be responsible, under the Avoided Energy Use Guaranty, for any loss of Avoided Energy Use Cost due to malfunction in the operation of the Equipment or alteration of energy supply unless such malfunction is due to an action or omission of the Company.

Section 6 Upgrading or Altering Equipment

Section 6.1: Actions by the Company

The Company shall at all times have the right to replace, delete or substantially alter any item of Equipment, add additional Equipment, revise any procedures described by Schedule B, or take other energy saving actions, so as to maintain or improve Equipment performance, subject to Customer's prior written approval. All replacements, deletions, substantial alterations, or additions of Equipment or revisions to the prescribed procedures shall be described in an additional schedule to be attached hereto and identified as Schedule B-2 or B-3, and so forth. Customer shall make the final determination regarding the scheduling of said modifications based on its own operational considerations. Replacements, substantial alterations, or additions of Equipment shall belong to and become property of Customer, and shall be part of the Equipment for purposes of this Agreement.

Section 6.2: Actions by Customer

Customer agrees to maintain the Premises in good repair and to protect and preserve the building envelope and the operating condition of all mechanical systems, equipment and other energy consuming systems located on the premises. At the time of the EA, the Company has informed Customer of needed repairs to structures and of problematic equipment, if any, which may effect energy efficiency. If the Company discovers that Customer has not made such repairs, it may adjust the energy consumption prior to

installation of the energy efficiency measures listed in Schedule B, per the calculations set forth in Section 9 of this Agreement. However, said adjustment shall not be applied to savings calculations for those months prior to the discovery, other than the six months immediately prior. Customer may not move, remove, alter, or change in any way the Equipment or any part thereof without first consulting the Company, except in an emergency.

Section 7: Standards of Service

a. The Company will design and manage the installation of Equipment so as to provide the standards of service and comfort (i.e., heating, cooling, hot water, lighting and so forth) described in Schedule E.

b. The Company agrees that if it contracts with any other contractors or subcontractors to undertake any activities hereunder or otherwise in connection with the Equipment, it shall be solely responsible for the employment and work performed by such contractors/subcontractors and the Customer shall have no responsibility what so ever. In employing any such contractors/subcontractors hereunder, the Company agrees to comply with all laws, rules and regulations and other requirements concerning such employment of contractors/subcontractors and agrees that the Customer shall have no responsibility whatsoever. Accordingly, any repairs, maintenance, damages or other acts caused by any such contractors/ subcontractor shall be the sole responsibility of the Company.

Section 8: Commencement Date and Term

The "Commencement Date" shall be the first day of the month after the month in which Customer executes a Certificate of Acceptance, per Section 3 and Schedule F, deeming that the Equipment is substantially installed and operational. The term of the Agreement shall begin on the date set forth on page E-4 hereof and shall run continuously from such date until the 10th anniversary of the Commencement date. However, the term of this Energy Management Agreement shall be coterminous with that of the Lease Agreement. If Customer exercises its option to terminate the Lease Agreement described under Section 1.1 (e) it may also, at its option, terminate this Energy Management Agreement at any time after the third anniversary of the Commencement Date. This Agreement is subject to cancellation only on anniversary dates (of the Commencement Date) upon thirty (30) days prior written notice to the other party, unless otherwise provided herein.

Section 9: Avoided Energy Use Cost and Compensation to the Company

Section 9.1: Avoided Energy Use Guaranty

The Company guarantees that Customer will realize aggregate energy use reduction as indicated in Schedule D. The dollar value of the energy use reduction utilized in the calculations shall not be less than the Base Energy Rates used in the EA, CEMP and Schedule D. The basis for the dollar amount arrived at by such calculation shall be the Avoided Energy Costs at the time of the EA for each of the consecutive twelve-month periods following the Commencement date. Each twelve-month period after the Commencement date will hereafter be referred to as a "Guaranty Year". The dollar value of the energy use reduction will be equal to at least the amount of the "Program Costs" incurred by the Customer and will meet the Customer's debt service provided the utility rates do not go below the price indicated in Schedule D.

Customer's Program Costs shall include all payments made by Customer to Lessor during the subject Guaranty year pursuant to the Lease Agreement. The Program Costs excludes: a) payment for additional equipment authorized by the Customer under change-order and not included as part of the Total Capitalized Cost or Program Cost per Section 2 and b) payments by Customer to the Company for modifications to Baseline Consumption per Section 10 of this Agreement.

In the event the avoided energy use realized by Customer is less than the amount indicated in Schedule D in any Guaranty Year, as indicated in Section 9.2, the Company shall, within thirty (30) days after conclusion of said Guaranty Year, calculate the dollar value of the unmet energy savings based on the electricity rate at the time of the EA and remit the amount of such deficiency to Customer. A late penalty of 12% per annum or part thereof or the highest rate permitted by law, whichever is lower, will be charged on any balance not received by Customer within thirty (30) days after a statement, which shall also be timely.

Section 9.2 Computation of Avoided Energy Use

After the installation and acceptance of the Equipment, the actual Avoided Energy Use shall be computed as specified in this section and further detailed in Schedule D. Three different types of Avoided Energy Use may be achieved under this Agreement: (a) Avoided Energy Use, (b) Fuel Switch Savings and (c) Energy Rate Savings. Total Avoided Energy Use Cost will be determined by adding together the Avoided Energy Costs, Fuel Switch Savings, and Energy Rate Savings for each Billing Period. The Customer shall provide to the Company copies of all energy related bills within ____ days after the Customer's receipt of such bills. The Company shall then determine Avoided Energy Use Costs for each Billing Period and for each Guaranty Year.

a) Avoided Energy Consumption are those savings achieved through reduction in energy or demand use. The Company will calculate Avoided Energy Costs achieved at the Premises utilizing the methodology set forth under this Agreement in Schedule D. The dollar value of the Avoided Energy Costs will be determined using the following formula:

Avoided Energy Costs =

$$(E_{elec} \times C_{elec}) + (E_{nat\ gas} \times C_{nat\ gas}) + (E_{steam} \times C_{steam}) + (E_{oil} \times C_{oil}) + (E_{other} \times C_{other})$$

where,

E_{elec} = amount of electricity saved in kilowatt hours in current billing period
C_{elec} = unit cost of electricity for the same billing period in $/kWh

$E_{nat\ gas}$ = amount of natural gas saved in therms in current billing period
$C_{nat\ gas}$ = unit cost of natural gas for the same billing period in $/therm

E_{steam} = amount of steam saved in pounds or Btus in current billing period
C_{steam} = unit cost of steam for the same billing period in $/pound or $/Btu

E_{oil} = amount of oil saved in gallons in current billing period
C_{oil} = cost of oil for the same billing period $/gallon

E_{other} = amount of other energy saved in Btus in current billing period
C_{other} = unit cost of other energy for the same billing period $/Btus

In no case shall the unit energy costs utilized in the calculations be less than the Base Energy Rates used in the EA and CEMP, provided in Schedule D. The dollar amount arrived at by such calculation shall be the Avoided Energy Costs for such billing period.

b) Fuel Switch Savings are those savings achieved by switching to a more economical source of energy. The Company will calculate Fuel Switch Savings using the following formula:

$$Fuel\ Switch\ Savings = [F_{current} \times C_{current}] - [F_{alt} \times C_{alt}]$$

where,

$F_{current}$ = Fuel use in kWh, gallons, therms or other appropriate units in current billing period
$C_{current}$ = Current fuel cost in $/kWh, $/gallon, $/therm or other units
F_{alt} = Alternate fuel use in kWh, gallons, therms or other units in current billing period
C_{alt} = Current unit cost of the alternate fuel in $/kWh, $/gallon, $/therm or other unit

In no case shall the unit cost utilized in determining the dollar value of the alternate energy used be more than the Base Energy Rate as used in the EA and CEMP, provided in Schedule D.

c) Energy Rate Savings are those savings achieved through a reduction in fuel and/or electricity rates by one of the following means: (i) improved rate from local electric utility company, natural gas company, or fuel company, (ii) Direct purchase of natural gas or electricity, or (iii) Bulk purchase of fuel. The Company will calculate the Energy Rate Savings obtained for each Billing Period as follows:

$$Energy\ Rate\ Savings = [C_{base\ rate} - C_{cur\ rate}] \times [E_{consumed}]$$

where,

$C_{base\ rate}$ = Base Energy Rate from the EA, CEMP and Schedule D in $/kWh, $/gallon, $/therm, $/kW or other units

$C_{cur\ rate}$ = Current unit energy costs in $/kWh, $/gallon, $/therm, $/kW or other appropriate units

$E_{consumed}$ = Energy consumed in kWh, gallons, therms or other units in current billing period

There will be no Energy Rate Savings calculation or penalty if the current energy rate exceeds the Base Energy Rate. There will be no Energy Rate Savings calculation unless an energy rate reduction has been initiated by the Company through one of the means listed in Section 9.2 (C)

Section 9.3 Avoided Energy Use Costs and Disputes

In the event the Company and Customer disagree as to the Avoided Energy Use Costs or Baseline Consumption modification, per Section 10, in any billing period or Guaranty Year during the Term of this Agreement, resolution of such disagreement will be negotiated in good faith by the parties.

If such disagreement is not resolved within sixty (60) days after the end of the time period in respect to which the disagreement arises, the Company and the Customer may submit the dispute to arbitration in accordance with provision of Section 20.

Section 9.4 Avoided Energy Use Cost Sharing

During the term of the Agreement, the Company shall receive a portion of the Avoided Energy Costs Savings experienced each year, by the Customer, with respect to the Premises. The Avoided Cost Surplus will be determined as follows:

$$Avoided\ Cost\ Surplus = E_{savings} - C_{prog\ costs}$$

where,

$E_{savings}$ = Annual Avoided Energy Cost Savings in Guaranty Year
$C_{prog\ costs}$ = Annual Program Costs in Guaranty Year

The Avoided Cost Surplus will be allocated as follows:

(a) 100 percent of Avoided Cost Surplus up to $_____ to the Company as the annual fee for providing monitoring as set forth in Schedule G. The maximum amount indicated will be escalated annually at the U.S. cost-of-living increase as published annually by the U.S. Department of Labor.

(b) 10 percent of Additional Avoided Cost Surplus to the Company, not to exceed ____ percent of total cumulative Avoided Energy Use Cost.

(c) 90 percent of the Additional Avoided Cost Surplus shall be escrowed to a reserve account by the Company for the Customer for the length of the Program. This account can be reinvested into additional EEMs or Preventative Maintenance items at the discretion of the Customer. Any balance at conclusion of the Program will be the property of the Customer.

Avoided Energy Use Costs in any Guaranty Year which exceed the amount of the Program Costs in such Guaranty Year will be put into an escrow account established by the Customer. Funds in this escrow account will be applied first to reimburse the Company for any payments made to Customer to meet the Company's guarantee for previous years in which Avoided Energy Use Costs were less than Program Costs for such Guaranty Year.

Avoided Energy Use Costs achieved during the installation period and prior to the Commencement Date, shall be added to and included in the Avoided Energy Use Costs for the first Guaranty Year.

Section 9.5 Billing

The Company will prepare and send to Customer a quarterly invoice setting forth the following in both units of energy and dollars for the premises: a) amount of Avoided Energy Costs, b) Fuel Switch Savings, c) Energy Rate Savings d) Total Avoided Energy Use Costs and e) Share of Avoided Cost Surplus due the Company, per section 9.4. Copies of the calculations performed by the Company pursuant to Section 9.2 hereof shall also be included.

The Customer shall, within thirty (30) days from the date of receipt of said billing, notify the Company of any irregularity in the billing.

Should Customer fail to provide notice of disagreement within thirty (30) days, Customer will not forfeit the right to challenge the Baseline modification or savings calculation for that quarter should irregularities come to Customer's attention at a later date.

Section 9.6 Independent Audit

After the first anniversary of the Commencement Date, and after each subsequent anniversary, the Customer may select independent certified public accountants or energy auditors to complete and submit to the parties an audit of the savings calculations and billings for the prior year (or years) selected by Customer. Exercise of the right to request an audit shall in no way affect Customer's obligation to make current payments as described in Section 9.4 and 9.5. Any payments between the parties necessary to resolve any irregularities identified in the audit will be made within sixty (60) days after submission of the audit to the parties. The Customer shall pay the cost of the audit. Any dispute arising from the audit shall be resolved by recourse to the arbitration provisions set forth in Section 20.

Section 9.7 Reconciliation of Accounts

Within thirty (30) days of the conclusion of each Guaranty Year, the Company shall submit to Customer a complete statement of account reflecting not only the Avoided Energy Use Costs, and share of Avoided Energy Use Costs paid by Customer, but also the deficiencies, if any, and payouts made to Customer, the purpose of which would be to reconcile accounts. If there is any difference between the amounts paid and the amounts owed during said Guaranty Year, the parties agree to pay said amount within thirty (30) days of receipt of the annual report.

Section 9.8 Late Payments

Customer shall pay the Company within thirty (30) days of receipt of the Company's invoices. Otherwise, a late penalty of twelve percent (12%) per annum or part thereof or the highest rate permitted by law, whichever is lower, will be charged on any balance not received by the Company within said thirty (30) day period.

Section 10 Modification of Baseline

Section 10.1 Material Change

Customer shall deliver to the Company a written notice of any actual or intended Material Change in use or condition of the Premises occurring after execution of this Agreement.

A "Material Change" shall include a change that reasonably could be expected to increase or decrease the amount of energy used at the Premises and can include a change in (a) the manner of use of the Premises by Customer, (b) the operating hours of any equipment, facilities or energy systems contained in the Premises, (c) the structure of the Premises, (d) occupancy rate, (e) types or amount of equipment used on the Premises, or (f) other conditions affecting energy use on the Premises other than those caused by the Equipment

Section 10.2 Baseline Modification Procedures

Within sixty (60) days after delivery of a notice describing a Material Change, the Company may calculate and send customer a written notice of a proposed modification of the Baseline Consumption to reflect the Material Change. The Company may prepare a proposed modification of the Baseline at the conclusion of the engineering design phase of the project, prior to construction, to reflect the Material Changes which will have transpired since completion of the CEMP. Such modification for any of the above reasons shall become effective unless disapproved by Customer within sixty (60) days by delivery of a reply notice.

If an adjustment results in a reduction to the Baseline, or if the Material Change results in reduced hours of operation, the portion of the Program Costs covered under the Avoided Energy Use Cost Guaranty, per Section 9.1 herein, and to be subtracted from Avoided Energy Use Cost when determining payment to the Company, per Section 9.4, will be reduced by the same percentage.

If an adjustment results in an increase to the Baseline, or if the Material Change results in increased hours of operation, there will be no corresponding change to the portion of Program Costs covered under the Company's guaranty or subtracted from Avoided Energy Use Costs when determining payment to the Company.

Section 10.3 Baseline Adjustment Costs

The cost of developing a new Baseline will be reimbursed to the Company by the Customer. This cost will be considered a Program Cost and will be included under the Avoided Energy Use Cost Guaranty per Section 9.1.

Section 11 Insurance

Section 11.1 Worker's Compensation Insurance

The Company shall procure and maintain during the life of this Agreement Worker's Compensation Insurance in accordance with the Worker's Compensation Act which

adequately protects all labor employed or subcontracted by the Company during the life of this Agreement.

Section 11.2 Comprehensive General Liability Insurance

The Company shall procure and shall maintain in effect during the life of this Agreement Comprehensive General Liability Insurance in an amount not less than $_____ each occurrence and $_____ aggregate for Bodily Injury Liability and $_____ for Property Damage Liability.

Section 11.3 Umbrella Liability Insurance

The Company may provide the limits of liability by a combination of the above described policy, per Section 11.2 and an Umbrella Excess Liability Policy.

Section 11.4 Guaranteed Avoided Energy Use Cost Performance Payment Policy

For the specified term of the contract, the Company shall provide an assurance for the Guaranteed Avoided Energy Use Cost Performance Payment to Customer for any avoided energy use cost guaranty payments which are the obligation of the Company per Section 9.1, but are not made. Said payments under this policy will be subjected to a 25 percent deductible and will be reconciled on an annual basis.

Section 11.5 Insurance Policies

Insurance policies described in this Section 11 must be in an amount and form, and be obtained from an insurer or insurers, reasonably acceptable to Customer, and shall state that such policies shall not be changed or cancelled without two (2) weeks prior written notification to Customer. Upon written request at any time during the term of this Agreement, Customer shall be named as an additional insured under any or all insurance policies described herein, and shall be provided with insurance company certificates certifying that such policies are in full force and effect.

Section 12 Casualty or Condemnation of Premises

Any fire, flood, other casualty or condemnation affecting any portion of the Premises may be a Material Change. If so, the notice required by Section 10 shall be given so that a Baseline modification can be made. If any fire, flood, other casualty, or condemnation renders a majority of the Premises incapable of being occupied and the affected portion is not reconstructed or restored within one hundred twenty (120) days from the date of such casualty or condemnation, the Company may terminate this Agreement by delivery of a written notice to Customer, whereupon both parties shall have no further additional

liability to each other. Any such termination shall not be considered an Event of Default on the part of either party.

Section 13 Damage to or Destruction of Equipment

If any significant item of equipment is irreparably damaged by the negligence or willful misconduct of an employee, destroyed, or stolen, and if Customer fails to repair or replace said item within a reasonable period of time, the Company may terminate this Agreement by delivery of a written notice to Customer whereupon both parties shall have no further liability to each other. Any such termination shall not be considered an Event of Default on the part of either party.

Section 14 Hazardous Materials

Certain of the structures on which the work described herein will be performed may contain hazardous waste and hazardous materials, including, but not limited to, asbestos, or other materials (collectively, the "hazardous materials"). It shall be the responsibility of the Company to determine whether or not such hazardous materials need to be removed or otherwise remediated prior to, or during, the implementation of any EEM listed in Schedule B. All costs associated with such removal and/or remediation shall be paid for by the Company. The Company will review the economics of the EEMs requiring remediation and will, prior to the start of any work on such EEM, advise the Customer to delete any EEM where remediation costs are determined to be too great when compared to potential savings. Further the Company shall be solely responsible for providing any and all notice, safety, containment, clean-up or other requirements, legal or otherwise, arising out of or in connection with the removal and/or remediation of hazardous materials.

The Customer and the Company do hereby acknowledge and agree that, in the course of installing the Equipment in accordance herewith, the Company shall remove from the ceiling of the Premises certain fluorescent lighting ballasts which may contain Polychlorinated Biphenyls (PCBs) and fluorescent lamps. The Company shall be solely responsible for undertaking any and all notice, safety, containment, clean-up or other requirements, legal or otherwise, arising in connection with the lighting ballasts and any PCBs and fluorescent lamps. The Company shall have all rights, duties, obligations and liabilities with respect to the receptacles into which such lighting ballasts and PCBs, if any, and fluorescent lamps are deposited and the ultimate removal from the Premises and disposition of such lighting ballasts and any PCBs and fluorescent lamps. The Customer shall have no obligation, duty or responsibility in connection therewith.

In no event shall the Company be deemed to be a generator of hazardous materials or PCBs with regard to this Agreement. The Customer shall provide the Company with the

necessary EPA and State Generator Numbers for Manifesting purposes and the Company shall comply with Customer regulations pertaining to such manifesting.

Section 15 Conditions Beyond Control of Parties

If either party shall be unable to carry out any of its obligations under this Agreement due to events beyond its control, such as acts of God, governmental or judicial authority, insurrections, riots, labor disputes, labor or material shortages, fires, explosions, or floods, this Agreement shall (i) remain in effect but the affected party's obligations shall be suspended until the uncontrollable event terminates; or (ii) be terminated upon ten (10) days notice to the other party, in which event neither party shall have any further liability to the other.

Section 16 Events of Default

Section 16.1 Events of Default by Customer

Each of the following events or conditions shall constitute an "Event of Default" by the Customer:

(a) Any failure by Customer to pay the Company its compensation required by Section 9 for a period of more than sixty (60) days after the date of the invoice;

(b) Any misrepresentation or warranty furnished by Customer in this Agreement which was false or misleading in any material respect when made; or

(c) Any other material failure by Customer to perform or comply with the terms and conditions of this Agreement, including breach of any covenant contained herein, provided that such failure continues for thirty (30) days after written notice to Customer demanding that such failure to perform be cured or, if cure cannot be affected in such thirty (30) days, without commencement of a cure and subsequent completion thereof as quickly as is reasonably possible.

Section 16.2 Events of Default by the Company

Each of the following events or conditions shall constitute an "Event of Default" by the Company:

(a) The standards of service and comfort set forth in Section 7 and Schedule E are not provided due to failure of the Company to properly provide its services herein and said failure continues for thirty (30) days after Notice to the Company without good faith effort by the Company to make the necessary repairs or adjustments;

(b) Any representation or warranty furnished by the Company in this Agreement is false or misleading in material respect when made;

(c) Any other material failure of the Company to perform or comply with the terms and conditions of this Agreement, including breach of any covenant contained herein, provided that such failure continues for thirty (30) days after Notice to the Company demanding that such failure to perform be cured or, if cure cannot be affected in such thirty (30) days, without commencement of a cure and subsequent completion thereof as quickly as is reasonably possible.

(d) The warranty on the Equipment provided under this Agreement or other equipment owned by Customer is terminated because of a direct action by the Company and such warranty is not reinstated within thirty (30) days after notice to the Company to correct the situation.

Section 17 Remedies Upon Default by Customer

In the event Customer fails to pay the Company its compensation when due or any other Event of Default by Customer occurs, the Company may, without an election of remedies:

(a) Exercise all remedies available at law or at equity or other appropriate proceedings including bringing an action or actions from time to time for recovery of amounts due and unpaid by Customer, and/or for damages which shall include all costs and expenses reasonably incurred in exercise of this remedy (including reasonable attorneys' fees), and/or for specific performance.

(b) Without recourse to legal process, terminate this Agreement by delivery of written notice declaring termination.

Section 18 Remedies Upon Default by the Company

In the Event of Default by the Company, Customer may, without an election of remedies:

(a) Exercise all remedies available at law or equity or other appropriate proceedings including bringing an action or actions from time to time for recovery of amounts due and unpaid by the Company, and/or for damages which shall include all costs and expenses reasonably incurred in exercise of its remedy (including reasonable attorneys' fees), and/or for specific performance.

(b) Without recourse to legal process, terminate this Agreement by delivery of a written notice declaring termination.

Section 19 Indemnification

The Company and Customer agree to indemnify, defend and hold each other harmless from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorneys' fees resulting from bodily injury or damage to property of others, arising out of, connected with or resulting from the negligence or misconduct of their respective employees or other agents in connection with their activities within the scope of this Agreement. However, neither party shall indemnify the other against claims, damages, expenses or liabilities resulting from the negligence or misconduct of the other party. If the parties are both at fault, then the obligation to indemnify shall be proportional to fault. The duty to indemnify will continue in full force and effect notwithstanding the expiration or early termination of this Agreement with respect to any claims based on facts or conditions which occurred prior to termination.

Section 20 Arbitration

Any dispute, controversy or claim arising out of or in connection with or relating to this Agreement or any breach or alleged breach hereof, shall, upon the request of any party involved (and without regard to whether or not any provision of this Agreement expressly provides for arbitration), be submitted to and settled by arbitration at the locality where the Premises are situated in conformance with rules of the American Arbitration Association then in effect (or at any other place or under any other forum of arbitration mutually acceptable to the parties). Any award rendered shall be final and conclusive upon the parties and a judgment thereon may be entered in the highest court of a forum, state or federal, having jurisdiction. The expenses of the arbitration shall be borne equally by the parties to the arbitration, provided that each party shall pay for and bear the cost of its own experts, evidence and counsel.

Section 21 Representation and Warranties

Each party warrants and represents to the other that:

(a) It has all requisite power, authority, licenses, permits, and franchises, corporate or otherwise, to execute and deliver this Agreement and perform its obligations hereunder.

(b) Its execution, delivery, and performance of this Agreement have been duly authorized by, or is in accordance with, its organic instruments, this Agreement has been duly executed and delivered for it by the signatories so authorized, and it constitutes its legal, valid and binding obligation.

(c) Its execution, delivery, and performance of this Agreement will not result in a breach or violation of, or constitute a default under any agreement, lease or

instrument to which it is a party or by which it or its properties may be bound or affected.

(d) It has not received any notice, nor to the best of its knowledge is there pending or threatened any notice, of any violation of any applicable laws, ordinances, regulations, rules, decrees, awards, permits or orders which would materially adversely affect its ability to perform hereunder.

Section 22 Additional Representations and Warranties of Customer

Customer hereby warrants and represents to the Company that:

(a) Customer has provided the Company with all records heretofore requested by the Company and the information set forth therein is, and all information in other records to be subsequently provided pursuant to this Agreement will be, true and accurate in all material respects except as may be disclosed by Customer in writing.

(b) Customer has not entered into any contracts or agreements with other persons or entities regarding the provision of energy management services or with regard to servicing any of the energy related equipment located on the Premises.

(c) Customer presently intends to continue to use the Premises in a manner similar to its present use, except as may have been disclosed by Customer in writing.

Customer will provide the Company with copies of any successor or additional contracts for management or servicing of preexisting equipment which may be executed from time to time hereafter within ten (10) days after execution thereof.

Section 23 Applicable Law

This Agreement and the construction and enforceability thereof shall be interpreted under the laws of the State of California.

Section 24 Compliance with Law and Standard Practices

The Company shall perform its obligations hereunder in compliance with any and all applicable federal, state and local laws, rules and regulations, including applicable licensing requirements, in accordance with sound engineering and safety practices, in a workmanlike manner and in compliance with any and all reasonable rules of the Customer relative to the Premises. The Company shall be responsible for obtaining all governmental permits, consents, and authorizations as may be required to perform its obligations hereunder.

The Company shall indemnify and save the Customer harmless from any and all liability, fines, penalties, and consequences from any noncompliance or violations of such laws, ordinances, codes and regulations as related to the services provided under this Agreement.

Section 25 Notices and Changes of Address

All notices to be given by either party to the other shall be in writing and must be either delivered or mailed by registered or certified mail, return receipt requested, addressed as follows:

If to the Company: _____

_____

If to the Customer: _____

_____

or such other addresses as either party may hereinafter designate by notice to the other. Notices are deemed delivered or given and become effective upon mailing if mailed as aforesaid and upon actual receipt if otherwise delivered.

Section 26 No Waiver

The failure of the Company or Customer to insist upon the strict performance of the terms and conditions hereof shall not constitute or be construed as a waiver or relinquishment of either party's right to thereafter enforce the same in accordance with this Agreement in the event of a continuing or subsequent default on the part of the Company or Customer.

Section 27 Severability

In the event that any clause or provision of this Agreement or any part thereof shall be declared invalid, void or unenforceable by any court having jurisdiction, such invalidity shall not affect the validity or enforceability of the remaining portions of this Agreement unless the result would be manifestly inequitable or unconscionable.

Section 28 Assignment

The Company shall not assign, transfer, convey, or otherwise dispose of this Agreement, or any part hereof, or its right, title or interest in the same or any part thereof, without the prior written consent of Customer. The Company shall not assign by power-of-attorney, or otherwise, any of the monies due or to become due and payable under this Agreement, without the prior written consent of Customer.

Section 29 Complete Agreement

This agreement, when executed, together with all Schedules attached hereto as provided for by this Agreement, shall constitute the entire Agreement between both parties and this Agreement may not be amended, modified or terminated except by a writing signed by the parties hereto.

Section 30 Further Documents

The parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Agreement.

Section 31 Customer Compliance with Checklist

The parties acknowledge and agree that the Company has entered into this Agreement in reliance upon the prospect of earning compensation based on projected savings in energy used at Premises, as set forth in Schedule G, attached hereto and made part hereof. The parties further acknowledge and agree that the said projected savings would not likely be obtained unless certain procedures and methods of operation designed for energy conservation shall be implemented and followed by Customer on a regular basis. Customer agrees that it shall adhere to, follow and implement the procedures and methods of operation and maintenance set forth on Schedule H, attached hereto and made part hereof.

Customer agrees that the Company shall have the right, with reasonable notice, to inspect Premises to determine if Customer is complying and shall have complied with its obligation as set forth above in Section 31. For the purpose of determining Customer's said compliance, the checklist as set forth in Schedule H as completed and approved by both parties during said inspections shall be used to measure and record Customer's said compliance. Customer shall make Premises available to the Company for, and during each said inspection, and shall have the right to witness each said inspection and the recording of the checklist. In the event that any inspection discloses that Customer has failed on the date of the inspection to be in compliance with any item on the checklist, payment to the

Company for the monthly compensation period preceding the date of said inspection or determination shall be based on the greater of:

(i) the projected avoided energy use cost (predicted undiscounted avoided energy use cost) for the compensation period as set forth in Schedule G; or

(ii) the normally calculated payment to the Company per Section 9.

IN WITNESS WHEREOF, and intending to be legally bound, the parties hereto subscribe their names to this instrument on the date first above written.

WITNESS: